Men-at-Arms

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Imperial Armies of the Thirty Years' War (2)

Cavalry

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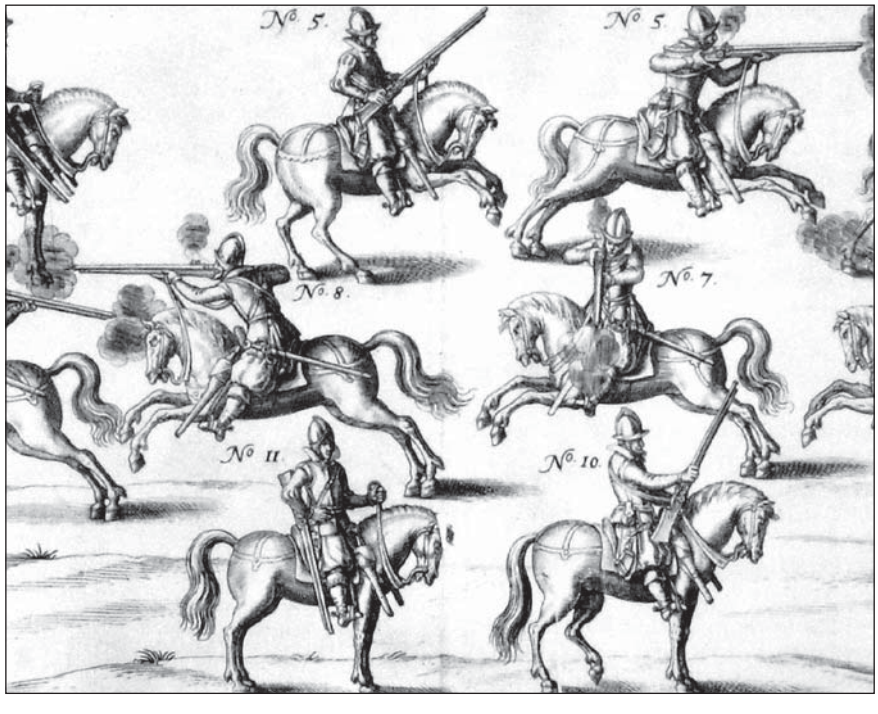

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Dedication

To my lovely girls: Teodora, Helena, Lea and Lara

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Author's note

Both this book, and the previous MAA 457 on Infantry and Artillery, are limited in their scope to those troops in the Imperial armies of the Thirty Years' War which were raised by the Austrian branch of the Habsburg family, i.e. the Holy Roman Emperors. Allied Spanish troops or units of the Catholic League which fought in these armies will require another work.

Artist's note

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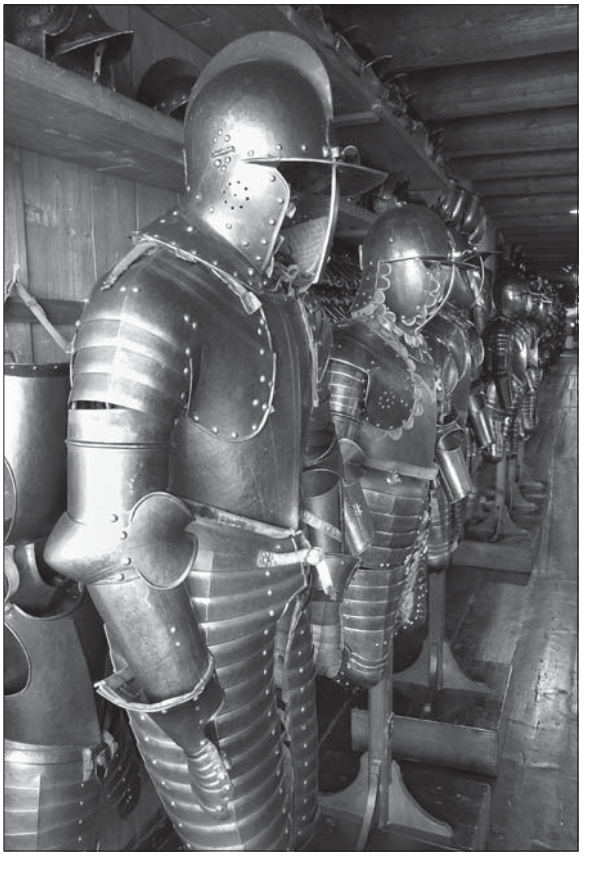
IMPERIAL ARMIES OF THE THIRTY YEARS' WAR (2)

CAVALRY

INTRODUCTION



These two suits of cuirassier armour are the heaviest in the Armoury at Graz; they weigh 42kg/92lb each, due to extra plates attached for reinforcement on the chest and back – there is even reinforcement on the *zischagge* helmet. Gilded buckles, belt ends and nasals, and the red velvet edging to the thick lining, demonstrate that they were made for wealthy officers. The especially broad tassets extend downwards over the knee. (LZH)

Although the cavalry's previous domination of the battlefield had been superseded by that of pike-and-shot infantry by the start of the 17th century, the mounted arm retained several significant roles. As in other Western European countries at the beginning of the Thirty Years' War, the Imperial cavalry was now composed of several distinct types of mounted troops. The regular battle cavalry comprised cuirassiers and harquebusiers, which were in the process of being augmented by dragoons – still considered during this period to be mounted infantry. For other duties the Imperial authorities recruited Croats and Hungarian hussars, irregular light cavalry drawn from the Military Frontier with the Ottoman Turks. During the course of the wars these were supplemented with mercenary Polish (usually light) cavalry.[1]

Cuirassiers (also termed lancers or pistoleers) were the heaviest cavalry, successors to the medieval knights who had been rendered almost obsolete during the 16th century by improved infantry firearms and tactics. They derived their name from the largest piece of armour still employed, the breast- and backplate or cuirass. Although their importance had been greatly diminished by social change and military developments, it was this cavalry type which usually provided bodyguard units, such as the 200-strong single company of lancers who formed Graf Wallenstein's Leibgarde in 1627. The heavy cavalry lance had already almost disappeared; some cuirassiers still carried them at the outbreak of the Thirty Years' War, but they had generally been replaced as the primary weapon with a brace of wheellock pistols.

Harquebusiers were only partly armoured, and carried various firearms; these included both the wheellock *harquebuse* or arquebus from which they derived their name, and shorter wheellock pistols. Originally they had been raised to use firearms to prepare the way for and give fire support to the main cuirassier charge, but as time passed and cuirassiers relied upon pistols the distinction

1 See MAA 457: *Imperial Armies of the Thirty Years' Wear (1): Infantry and Artillery* for those arms; for general material on the Imperial military system; and for a summarized outline of the campaigns during the various phases of the war between 1618 and 1648. For more detailed material on infantry tactics in this period, see also Elite 179: *Pike and Shot Tactics 1590–1650.*

Imperial cuirassiers at the siege of Magdeburg, May 1631. Note the officer (left) with ornamental plumes, a red sash over his shoulder, and a commander's baton. The left-hand of the two cornets (centre) carries a standard displaying the Madonna; and note (centre right) the long, bannered trumpet. (Detail from Merian, *Theatrum Europeum*)

between the two became less clear. Many units initially raised as harquebusiers were later upgraded to cuirassiers when better horses and equipment became available for them; and as cuirassiers progressively shed their armour, they came to look more like harquebusiers.

However, it was the expansion of the dragoon units that had the greatest impact. Gradually replaced by dragoons in the mounted fire role, the harquebusiers had completely disappeared as a distinct cavalry type by the end of the Thirty Years' War. Initially dragoons had been simply infantry who were mounted for greater mobility. While retaining their infantry status, they gradually established themselves as a separate branch of the mounted arm. Like the infantry, most were armed with muskets – albeit about 10cm shorter, at around 1.38m (4ft 6in), and of smaller calibre, usually about 15mm.[2] These mounted musketeers were unarmoured, except for those who continued to wear an open helmet.

The light cavalry originated in the irregular mounted troops recruited from among the Christian populations that had faced the Ottoman Turks' advance into south-eastern Europe in the 16th century. The near-continuous warfare in this area – the Military Frontier – influenced both their style of fighting and their equipment. At the beginning of the Thirty Years' War they were hired as irregular units, but during the course of the long campaigns they were formed into regular companies and, later, into regiments.

Detail of a painting by Pieter Snayers, showing a cavalry clash at the battle of Diedenhofen, 1639. The staff of the small standard is shaped like a jousting lance; it is carried with the butt attached to the stirrup, supported by a right arm strap from a sliding ring – note that he is also carrying his sword. (HGM)

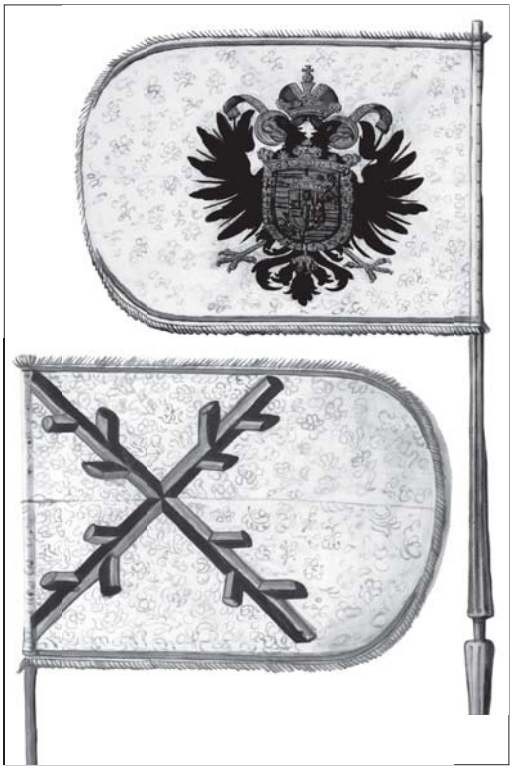
RECRUITMENT

At the beginning of the period, Imperial cavalry was mainly raised from three sections of society. First were the local nobility, who were obligated within the feudal system to serve the monarch in wartime; most served in the cuirassier units. Secondly, local militias or *Land*

2 Some contemporary military writers – including Johann von Wallhausen (1616), Hermann Hugo (1630) and Wilhelm Dilich (1647) – maintain that some dragoons carried pikes instead, although this may be a mistaken reference to other lance-armed troops, and whether dragoons ever actually carried pikes is hotly disputed by historians.

(provincial) reserves were raised and equipped by the Land Estates (provincial assemblies of nobles, clergy and rich merchants); these served mostly as harquebusiers, although some as cuirassiers. The third group, which soon became the most important numerically in both branches of the cavalry, were professional mercenaries.

Mercenaries were raised either directly by the Imperial central government or, more often, through a 'war contractor', who also equipped and supplied them. This latter method reached its highpoint in 1625, when Emperor Ferdinand II contracted the wealthy Bohemian nobleman and military entrepreneur Albrecht von Wallenstein to raise an army and mount military operations on his behalf. Letters patent (*Articelbriefe Capitulation*) prescribed the number of regiments and companies that contractors were authorized to recruit, set out the numbers of cavalry to be raised from particular districts, and gave contractors the authority to appoint regimental officers up to the rank of *Obrist* (colonel). As in the infantry, Wallenstein selected these regimental commanders from among experienced veterans and gave each a number of letters patent, entitling each colonel to recruit and select his own officers, who would then recruit the troopers. (Issue of letters patent did not actually guarantee the raising of a unit, as the necessary money or pool of local recruits was often lacking.)



An unidentified white cavalry standard – thus perhaps of a regimental Leibkompanie? – unusually bearing the Imperial arms on the reverse rather than the obverse. The *Doppeladler* of the Holy Roman Empire is surmounted by the Imperial crown. On its breast, surmounted by an open crown and surrounded by the chain of the Order of the Golden Fleece, is a shield-shaped escutcheon. Its first and fourth quarters are the arms of 'old Hungary' (eight red and white bars), the second and third the arms of Bohemia (silver lion on red). In the centre are the Spanish arms, displaying – among others – those of Castile and León, Aragón and Sicily. The heraldry thus reflects all the lands ruled by Habsburg monarchs. On the obverse of the standard is the Burgundian saltire (*croix ragulée*). This, and all the other standards illustrated in this book, are careful paintings made from 17th-century originals captured by Swedish troops. (Armémuseum, Stockholm, ST 12:476; artist Hoffman-Jonsson; photograph Kjell Hedberg).

These Imperial formations were supplemented by taking into Imperial service whole regiments or companies that had originally been raised to protect local territory by princes of the Holy Roman Empire – especially the *Fürstbischöffe* ('prince-bishops', ecclesiastical rulers) – by petty rulers and by free towns. Imperial nobles and private entrepreneurs of lower social standing would often raise regiments at their own cost and offer them to the Emperor, in return for command of the unit or some other personal advancement. With volunteers drawn from all across Catholic Europe, the ranks of the Imperial cavalry included not only Austrians, Germans, Italians, Czechs, Slovaks, Hungarians, Croats and Poles, but also Spaniards, Walloons, Irish and Scots. During Wallenstein's major recruitment drive of 1625, Johann Count Merode-Varoux raised a large contingent of Walloon (Belgian) cavalry in 25 to 30 companies, so that three regiments could be formed from these men alone. Alongside many of the Walloons he had recruited, Merode was killed during the battle of Hessich-Oldendorf in July 1633, after which the level of Walloon participation within the Imperial forces dropped dramatically.

The Croat and hussar light cavalry were recruited in the kingdoms of Croatia-Slavonia and Hungary by local nobles who had been issued with Imperial letters patent. Additional Poles and Cossacks were usually hired as complete units, raised by Polish military entrepreneurs from the lands of the Polish crown or the eastern fringes of Europe, although some Imperial colonels were also granted patents to raise Polish cavalry.

ORGANIZATION

This, and the five other standards illustrated on pages 7–11, are all possibly from Ottavio Piccolomini's cuirassier regiment, 1637–48. All of them bear on the obverse the arms of the Holy Roman Empire, with the escutcheon displaying the arms of Austria. The field of this Leibkompanie standard is white European damask – thick silk – scattered with 'flames' on both sides. In the obverse hoist corner is the cypher F III (for Ferdinand III). On the reverse is an elephant, under sunbeams breaking through cloud in the top fly corner, all over the motto *(P)OST NUBILA PHOEBU(S)* – 'After the clouds, comes the Sun'. Its gilded iron finial is pierced with the Burgundy saltire. (Armémuseum, Stockholm, ST 12:517; artist Hoffman-Jonsson; photograph Kjell Hedberg)

During the 16th century Imperial cavalry had functioned on a mercenary basis, being raised in *Fahnlein* (small detachments or companies) for a specific campaign and then disbanded, although some were taken on as standing formations to protect the Military Frontier. In 1600 those cavalry companies already in Imperial pay were organized by Emperor Rudolf II into regiments numbering 500 to 1,000 men, comprising four or five companies each of 100–250 men. Although recruits might sign up for anything between one campaign and a period of several years, during the Thirty Years' War the mounted arm's organization became increasingly standardized. Regiments had a nominal strength of 1,000 men; in reality they mustered about 600–800 at the outset of a campaign, but thereafter losses, desertion or insufficient recruitment could reduce them to only 200–300.

Individual companies now numbered around 100 men, although for tactical reasons two or more companies were usually grouped into a squadron, which formed up five to ten ranks deep. (However, note that the designations 'company' and 'squadron' are not used consistently in period documents.) As the wars progressed, the regiments often deployed by individual squadrons, which became the basic tactical and organizational unit in the cavalry. The cavalry regiment was not a permanent formation, and during their existence many had a fluid structure. A unit could start as an independent company of veteran mercenaries, around which a regiment might be raised. Thereafter, casualties and desertions, or the death of their *Inhaber* (proprietor), might reduce a regiment to a few understrength companies, which might be allocated to other regiments or simply disbanded. For example, in 1622, when the Scherffenberg harquebusier regiment was disbanded, Rittmeister Rothal created an independent company from the survivors, which was known by his name. The following year these Rothal harquebusiers were upgraded to a cuirassier company, which in 1624 was incorporated into the Strozzi cuirassier regiment.

Ranks and responsibilities

The regiment was known by the name of its Inhaber or colonel-proprietor, who enjoyed substantial privileges and powers in return for partially financing the unit. Many Inhabers held senior appointments in the army, such as Generalwachtmeister (major-general) or General-Feldzeugmeister (general of artillery), and the regiment's field commander was its Obrist (colonel). The colonel's staff was smaller than that of an infantry regiment, comprising an Obristleutenant (lieutenant-colonel), Auditor (legal officer), secretary, chaplain, Quartiermeister, Wagenmeister (transport officer), Proviantmeister (supply officer), Heerpauker (chief armourer), Profos (provost) with his men, and, in the heavy and dragoon regiments, a drum major.

Regimental musicians, also attached to the staff, were trumpeters with some kettledrummers or, in the dragoons, ordinary sidedrummers and fifers.

The Inhaber had the power to appoint regimental officers, to draw up the regimental regulations, organization and drill, and to specify many features of the unit's armour and dress. While he also sometimes held the rank of regimental Obrist himself, he was rarely present in person, so actual command was exercised by his deputy (whether the colonel or lieutenant-colonel), who took care of daily administration and commanded the regiment in the field. Besides their regimental duties, these senior officers also held personal command of a company within the regiment, for which they received additional pay; usually, the 1st Company was called the Leibkompanie ([colonel's] bodyguard company) and the 2nd was the Obristleutenantkompanie (lieutenant-colonel's company). The duties of the other staff were essentially the same as in the infantry.

The company staff – also known as the *Prima Plana*, since they were listed on the first page of the muster roll – was made up of a Rittmeister (or Hauptmann in the dragoons – major/captain), Leutenant (lieutenant), Cornet (Fähnrich in the dragoons – ensign), Wachtmeister (sergeant), Quartiermeister, Musterschreiber (Fourier in the dragoons – administrative NCO), surgeon, saddler, farrier and Plättner (armourer or blacksmith), two or three Rottenmeister (corporals), one or two trumpeters (drummers in the dragoons), and 80–90 troopers. The Rittmeister was responsible for his company and most of his duties were supervisory, including dealing with pay, equipment and discipline; in the field, his position was at the head of his men, accompanied by a trumpeter/drummer. The Leutenant acted as the Rittmeister's deputy; his primary duty was training the troops, but he was also responsible for managing the company's equipment, setting and checking sentries, directing the baggage train and supervising the provision of medical help for the sick and wounded. In the field, he would be positioned behind the main formation. The Cornet's main responsibility was carrying the company standard (sometimes called the guidon); he took position in the centre of the front rank, just behind the Rittmeister, to guide the charge or to act as a rallying point as the unit re-formed or retreated. The Wachtmeister was the senior company NCO and usually the most experienced soldier. He assisted the Rittmeister with the internal direction of the company, his main task being the maintenance of order and correct drills. Each Rottenmeister took charge of part of the company and supervised his men's weapons, equipment and training on a day-to-day basis. Any additional company musician would be positioned amongst the ranks to repeat the main trumpet/drum signals.

Light blue damask standard, the field scattered with 'flames' around the charges. The clear image on the obverse shows the Imperial crown above the *Doppeladler*; the escutcheon on the breast displaying the arms of Austria (white bar on a red field) is surrounded by the chain of the Order of the Golden Fleece, below an open kingly crown from which the eagle's necks and haloed heads emerge. The cyphers are F III. and R I, for Ferdinand III, Rex Imperator – 'King and Emperor'. On the reverse of this standard is an image of the Virgin of Loreto, with the Christchild holding an orb, and the motto *IN TE CONFIDO* – 'In Thee I trust'. The pierced finial with the Burgundian saltire is of silvered iron. (Armémuseum, Stockholm, ST 12:518; artist Hoffman-Jonsson; photograph Kjell Hedberg)

Light blue damask standard, scattered with 'flames', with a silvered iron finial of a plain saltire crossed by a sword. On the obverse the cyphers are F III and R.I. On the reverse is St George in armour fighting a dragon, below the motto *SVPER ASPIDEM ET/ BASILISCVM AMBVLABIS* – 'Upon the serpent and the basilisk, you shall tread'. (Armémuseum, Stockholm, ST 12:521; artist Hoffman-Jonsson; photograph Kjell Hedberg)

The regiment was typically followed by a large baggage train (*Tross*), which included servants, sutlers, soldiers' wives and children, camp-followers such as mistresses and prostitutes, together with civilian pedlars and craftsmen. Sometimes this train would exceed the unit strength: in 1646 one Bavarian cavalry regiment, with a strength of 481 troopers, was followed by 236 servants, 102 women and children, nine sutlers and 912 horses.

Discipline

The Inhaber usually exercised judicial authority over all members of the regiment, including its accompanying hangers-on and sutlers. Unusually, however, the Inhabers of cuirassier and harquebusier regiments had no such judicial power over the troopers, due to their social status – the noble background of these cavalrymen, especially in the cuirassiers, meant that they were subject to less rigid rules, and could even bring their servants along to fight. Even though the rigid social structures of the heavy cavalry faded away, Inhabers still lacked the power of life and death (*ius gladii*) over miscreants until 1748, but nobles were not exempt from punishment; in these cases power was exercised directly by the commanding general and the Imperial central authorities.

For instance, during the battle of Lützen in 1632, Von Sparr's cuirassier regiment in Pappenheim's corps fled the field. The Imperial commander, Wallenstein, appointed a court martial, which directed the execution of the officer in command during the battle, Col Hagen, together with LtCol Hofkirchen, ten other officers and five troopers. They were beheaded with the sword, while two men found guilty of looting the baggage were sentenced to a less honourable death by hanging. The remaining troopers were decimated, one in every ten cavalrymen being hanged; the others were assembled beneath the gallows, beaten, branded and declared outlaws. Their standards were ignominiously burned by an executioner after the Emperor's monogram had been cut from the fabric.

Horses

Prior to the Thirty Years' War, cavalrymen were usually under a feudal obligation to provide their own horse and equipment. However, as permanent formations developed, both regiments and, on a larger scale, the state central authorities purchased the mounts. Horse-breeding had not reached a commercial scale in the Habsburg Hereditary Lands, so to supply the considerable and constant demand many horses had to be bought in from elsewhere, often through intermediary Jewish horse dealers. Bigger breeds were purchased in the northern German areas of Hanover and Holstein, while smaller horses came from Hungary, Moldavia and Poland. Armies still required large numbers of remounts even out of the campaign season, and when on campaign equine casualties were always higher than human losses. At the first battle of

Breitenfeld (1631) some 4,000 out of 9,000 horses were killed, and at Lützen Gen Piccolomini alone had seven horses shot under him.

As warfare had changed in late medieval times, the demand for heavy horses to carry armoured knights had given way to a requirement for lighter, swifter mounts. The 'hot-blooded' breeds, such as the Arabian and thoroughbred, were introduced to add speed and manoeuvrability to the traditional 'cold-blooded' qualities of the heavy horses which had provided medieval destriers. The resulting 'warm-bloods' formed the basis for most of the breeds, which are collectively known as the 'Baroque horse': the Neapolitan, Iberian, Andalusian, Lipizzan, Frederiksborger, Friesian, Ginetta, Kladruber, Manorquin, Murgese, Hanoverian, Holsteiner, Oldenburg and Lusitano breeds. However, some old breeds survived. Known as 'heavy warm-bloods', these were still employed with the heavy cavalry and heavier vehicles; they included the Old-Oldenburg, East Friesian and Groningen, together with similar horses from Silesia, Saxony-Thuringia and Bavaria, and the Hungarian Nonius, Kladruber, and Cleveland Bay are also often classed as 'heavy warm-bloods'. The light cavalry particularly preferred Eastern horses, usually known as 'Turkish' stock, which included Anatolian, Persian, Turkish, Kurdish, Crimean, Caucasian, Polish and Arab breeds.

Preparing a horse for military service was a lengthy process. After the initial breaking-in of a young horse on the lunge or long rein, he was trained to carry his rider. A combat horse would then be taught to make his own contribution to the fighting by rearing to attack the enemy's mount, or to kick him with his hind legs. Finally, the horse had to become accustomed to the sights, sounds and smells of battle, especially musketry and wounds, so battlefield conditions were often simulated during training. Ideally, the horses were at least seven years old before going into action, by which time they were mature, properly schooled, and sufficiently trained to face the ordeal of battle.

Light blue damask standard scattered with 'flames', the iron finial pierced with the Burgundy saltire; note also the fringing, and the tassels. The obverse is as the previous illustrations. On the reverse, an angel dressed in a helmet and cuirass stands on a cloud, holding a sword in his right hand and a pair of scales in his left. The motto is *VENITE AD IVDICIVM* – 'Come to Judgement'. (Armémuseum, Stockholm, ST 12:522; artist Hoffman-Jonsson; photograph Kjell Hedberg)

Standards

Flags and standards were not yet regulated, but there were clearly three different sizes for the cavalry. The heavy cavalry carried small, square standards; the dragoons, a larger standard (but smaller than an infantry colour), which was swallow-tailed or rounded in the fly, and influenced by the Turkish style; and the Croats used large, single-tailed pennons. Every company within a regiment had its own standard, which created a colourful and varied collection of patterns, although most had a red, yellow or white background. All the centrally funded Imperial cavalry regiments carried standards with the Imperial *Doppeladler* (double-headed eagle) on the obverse, usually with the *Bindenschild* (Habsburg coat of arms) and the Imperial cipher. On the reverse a wide variety of devices were painted. The Madonna was frequently depicted, sometimes on a white background edged in gold, set on an azure blue field. Other motifs included pelicans (a

On the reverse of this light blue damask standard is an armoured horseman with a raised sword, and (right) a pelican piercing its own breast, in a nest made of a flaming crown of thorns. As usual, the field is scattered with 'flames'. The motto in Gothic script is '*Gott lieben und gerrectigheit/das ist ein schönes Ehrenkleidt*' – 'Love of God and justice is a beautiful raiment of honour'. Note the sliding ring on the staff, for an arm-strap. (Armémuseum, Stockholm, ST 12:524; artist Hoffman-Jonsson; photograph Kjell Hedberg)

symbol of self-sacrifice), lions, elephants, a hand gripping a sword or broken lance, a sword with a snake coiled around it, or a boat stranded on a beach. The Burgundian saltire ('ragged cross'), usually in black, often appeared under the main symbol on both sides. Units raised by local nobility would often show local saints and the Inhaber's own coat of arms. The 1st Company standard, usually white, bore the main design, with variations used on the standards of other companies – often parts of the Inhaber's heraldic arms.

The period just before the Thirty Years' War saw the start of the widespread practice of adding individual mottoes to flags and standards, usually expressing devotion to the Catholic faith and Imperial cause. Within a field army there would often be a fairly common motto, such as Tilly's *Pro ecclesio et impero* ('For Church and Emperor'), although Inhabers' family mottoes, or expressions of military determination, were also used. These mottoes were usually in Latin, but sometimes in German, Italian or French. (For several examples see the illustrations in this book, of Imperial colours captured by the Swedes.)

Musicians

The musicians attached to each unit were known as its *Feldmusik*, and would play on the march and on ceremonial occasions, when they would play in particular the *Ehrenstreich* ('honour beat'). It was during the Thirty Years' War that the signalling instruments truly separated from the accompanying band, and their role was formalized. Their signalling function elevated the status of these musicians above that of the ordinary troopers. They rode near the commander on high-quality horses, and as well as transmitting his orders they performed as aides or even as battlefield negotiators, like medieval heralds. The Germans are thought to have been the first to draw up instruction books for common trumpet calls (*Feldsticke)*, from around 1600. The basic calls became standardized in 1614, when the Bavarian court composer, Bendinelli, published *Tutta l'Arte della Trombetta* ('The Complete Art of Trumpet Playing'), with the military calls: Saddle Up, Mount Up, Parade Order, Stand to (the standard), Skirmish Order, Pitch Tents, Retreat, Form Up the Guard – albeit played over just three tones of the harmonic scale. In 1623 court musicians were enfranchised in Germany as the Imperial Guild of Court Trumpeters and Kettledrummers; the members were all officers, and were permitted to wear the ostrich-feather plume, a traditional symbol of nobility.

At the outbreak of the wars the trumpet was still a high-status instrument, and consequently was supposed to be used only by cuirassier units; across the 'bends' it was still up to a metre long, and played only in the key of 'D'. While more affluent Inhabers may have provided this instrument, most other mounted units continued to use the simpler horn, now usually made of metal, although many would still have been bone or wood. A moderately curved instrument, it widened from the

mouthpiece to a 'bell' end and, due to the different shapes, could be played across a range of keys. The trumpet was known for its bright, strident and brash sound, while the horn had a darker and mellower tone. The Thirty Years' War also saw the start of banners being hung under the trumpets, displaying symbols similar to company or regimental standards.

Still considered as infantry, the dragoons retained the simple drums and fifes used for signalling and marking marching-time on foot. Dragoon fifers would carry their instruments (which were up to 74cm/29in long, with six holes) on the front right side of the saddle in a leather-covered wooden case, which contained up to four fifes of varying lengths. The drums, which were the dragoons' only signalling instrument, were about 60cm/24in high; the brown wooden shell was decorated, usually with the coat of arms or other symbols of the Emperor or Inhaber. The skins were secured through ten holes in the wooden rims, through which up to 15m/50ft of tightening cord ran across the body. In camp, garrison or on ceremonial occasions the heavy cavalry also used kettledrums (*Pauken*). Alongside the standards, these drums became important symbols of the cuirassier units, which had usually been provided with them at the expense of the Inhaber, but they were never carried into the field. Other units could only acquire them as captured booty (the Lissowczyk Croats appeared at Nancy with a drum so large that it had to be taken off the horse and played by four men).

Light blue damask standard, the fields scattered with 'flames' around the charges, the obverse as in previous illustrations; the iron finial is pierced with the Burgundy saltire. On the reverse is a scene of Golgotha, the Cross surmounted by 'I.N.R.I'. Before the crucified Christ kneels a bare-headed soldier dressed in three-quarter armour, with a lace collar and a waist sash; his right hand rests on his helmet on the ground, and his left is extended towards Christ. Across the top of the field is the Gothic motto '*Ein güets Gewisen macht ein güets Hertz/ Ein güets Hertz macht ein güets Gewisen*' – 'A clear conscience makes a good heart, a good heart makes a clear conscience'. (Armémuseum, Stockholm, ST 12:525; artist Hoffman-Jonsson; photograph Kjell Hedberg)

THE FIRST REGULAR REGIMENTS

The oldest regiments in the Imperial army of the Habsburgs, which existed continuously until 1918, could trace their raising to the Thirty Years' War. The oldest cavalry regiment (in its last years, 8th Bohemian Dragoon Regiment 'Count Montecuccoli') was raised by its Inhaber, Gen Heinrich Dampierre, in 1616, when it comprised three Fähnlein. From 24 March 1619, another five companies – 300 harquebusiers in the Netherlands, and 200 cuirassiers in Austria proper – were raised by Grand Duke Cosimo II Medici at his own cost, but Dampierre was confirmed as colonel-proprietor of the enlarged unit, which was known as the Florentine regiment from its entry into Imperial service in 1621. When the Protestant nobility of Upper and Lower Austria brought an army to Vienna in 1619 to petition King (and future Emperor) Ferdinand II, going so far as to threaten him in his own throneroom at the Hofburg Palace, one of the two cuirassier companies stationed in Krems, together with five companies of Dampierre's harquebusier regiment (a total of 500 men), were brought into Vienna in response by Arsenal-Captain Col St Hilaire. After crossing the Danube by boat they marched into the city on 5 June with flags flying and trumpets playing. Entering the grounds of the Hofburg through the Fishermen's Gate, the

An Imperial-yellow damask cavalry standard emblazoned on the obverse with a plumed helmet surrounded by a swarm of bees trying to enter through the visor, below the motto *EX BELLO PAX* – 'From war comes peace'. On the reverse, the *Doppeladler* lacks an escutcheon and cypher. (Armémuseum, Stockholm, ST 13:584; artist Hoffman-Jonsson; photograph Kjell Hedberg)

cavalry paraded in a dramatic show of support for their monarch, which was enough to prompt Ferdinand's enemies to make a rapid withdrawal.

A relieved Ferdinand rewarded the Florentine regiment with special privileges: 'The regiment was allowed to play its trumpets and to fly its standards while marching past the Hofburg and through Vienna, as well as being permitted to set up a recruiting stand on the Hofburgplatz for three days and to recruit freely. During that time, the regiment's commander was provided with free lodging in the Hofburg – where the regimental standard was brought, and placed under guard – and was permitted to appear unannounced in full armour before His Majesty.' In addition, the regiment was never to be disbanded, and its men could not be sentenced to death except for a serious crime. (These privileges were made permanent by Emperor Franz I in 1810.)

The regiment was in fact reduced to three independent companies (Dampierre, D'Espaigne and Corpes) in 1623. The following year, together with two other former companies of the Dampierre regiment, the first two of these surviving independent companies were incorporated into the Strozzi harquebusier regiment, while the third was destroyed at Wistenritz in November 1623. In 1626 this harquebusier regiment was upgraded to cuirassiers, and in 1635 Hans Christoph Puchheimb was appointed as its next Inhaber. Unlike many other units, the regiment retained its identity through these changes of proprietor. The final change during the war came in 1647, when its next Inhaber was Johann De Werth. The regiment fought in all the major battles of the war, including Dessauer Bridge (1626), the two battles of Breitenfeld (1631, 1642), Lützen (1632) and Nördlingen (1634). It continued to serve after 1648, being listed as Kavallerie-Regiment Nr.4 in 1769 and Kürassier-Regiment Nr.8 in 1798. In 1867 it was converted into Dragoner-Regiment Nr.8 until its disbandment in 1918.

A second regiment that could trace its origins to the Thirty Years' War was 10th Bohemian Dragoon Regiment 'Prince of Liechtenstein', whose lineage stretched back to 1631, when five companies of dragoons were raised by Col Christian Illow. By 1634 another five companies completed a full regiment, with D'Espaigne as its Inhaber; in 1640 it became the De la Corona dragoon regiment. Ranked as Kavallerie-Regiment Nr.7 in the Imperial line, it was variously a regiment of Chevauxlegers, Dragoons and Uhlans, before its final designation as the Bohemian Dragoner-Regiment Nr.10 in 1873.

One other regiment from this period was only briefly disbanded, before ending its service as 10th Moravian Dragoon Regiment 'Friedrich Franz IV, Archduke of Mecklenburg-Schwerin'. Raised in northern Germany in 1629 by Obrist Ottavio Piccolomini, commander of Wallenstein's bodyguard, in seven companies of harquebusiers, the regiment was upgraded in 1633 to a cuirassier regiment of ten companies. It took part in many actions of the Thirty Years' War, and

its prominence in the thick of the fighting resulted in the deaths of several of its commanders: Obristleutenant Avogardo at Lützen (1632), Obristleutenant Crespy at Leipzig (1642), and Obristleutenant Graff at Jankau (1645). At Lützen, according to some sources, while making a reconnaissance with some of his men Rittmeister Martinelli of the Piccolomini regiment encountered a group from the Swedish royal entourage who were carrying the wounded Gustavus Adolphus to safety, and shot the king in the back. While other sources credit this to Obristleutenant Moritz von Falkenberg, commander of the Götz cuirassiers, and Gustavus Adolphus was also wounded by Croats (see below), the Swedish king was certainly finished off with a pistol-shot to the temple by a trooper from the Piccolomini regiment. In that same year of 1632 the regiment was re-named Alt-Piccolomini to distinguish it from a new cuirassier regiment raised by the same Inhaber. In 1656 the Inhaber changed to Caprara, and in 1663 to Aenea Sylvio, before the regiment was disbanded in 1701 and its five companies incorporated into the newly raised Prinz Philipp of Hessen-Darmstadt cuirassiers. Renumbered as Kavallerie-Regiment Nr.20 in 1769, this unit subsequently became Kürassier-Regiment Nr.10 in 1798 and Nr.6 in 1802, before its final conversion to the Moravian Dragoner-Regiment Nr.10 in 1867.

WARTIME CAVALRY STRENGTHS

The Bohemian phase, 1618–24

At the beginning of the Thirty Years' War there were no standing formations in Imperial service except for two regiments which had been retained after the Uskok War of 1616–17: the Maradas cuirassier regiment (disbanded in 1641), and Dampierre's Florentine harquebusier regiment (see above). Thereafter the war required the rapid creation of increasing numbers of cavalry regiments by mercenary enlistment; the mounted arm reached its high point in 1636, when 101 regiments were serving in the Imperial army.

In 1618, the initial two regiments were joined by the newly raised Puchheimb harquebusier regiment, and over the following 12 months an additional four new regiments each of harquebusiers and cuirassiers were raised, to bring battle cavalry strength to about 4,300. With the addition of the first irregular light units of Croats and Hungarian hussars, there were 4,575 cavalry at the Imperial camp at Mirowitz and another 3,529 in southern Moravia in September 1619.

In 1620 another 7 new regiments were raised, and at the victorious battle of the White Mountain that November, 11 of the existing 18 regular cavalry regiments served in Bouquoi's army. Here 6 regiments of harquebusiers – Dampierre (250 men), Meggau (300), Löbl (400), Montecuccoli (300), Histerle (300) and La Croix (300) – were joined by 4 of cuirassiers – Maradas (400), Florentine (200), Wallenstein (800) and Gauchier (500) – together with 300 Polish light cavalry. After this success, the battle cavalry was expanded in 1621 to 25 regiments (17 harquebusier and 8 cuirassier), in part for the subsequent pacification of Bohemia. However, in 1622 the severe financial strain of that campaign

Two portraits of Georg Aichelburg of Prozor, by Otochac. The image with the red and white swallow-tailed standard dates from 1623 when, as a young cornet, he joined the 'Florentin' (second Dampierre) regiment of mixed cuirassiers and harquebusiers. His hat plumes are red and white; he wears an expensive laced white neckerchief (or collar-points tied together), a long coat buttoned up in the Turkish manner, breast- and backplates, and long boots turned down with white boot-hose visible at the top. His helmet hangs on his saddle holster.
In the second portrait, from a later period, Aichelburg's hat feathers are blue, his neckerchief is simpler and in red, his coat is shorter, and his boots have been replaced with shoes. (Wladimir Aichelburg Collection)

forced a reduction to 9 regiments (3 of harquebusiers and 6 of cuirassiers), and after some reallocation of personnel just 7 regiments (4 of harquebusiers and 3 of cuirassiers) remained in 1624.

The Danish phase: the rise of Wallenstein, 1625–30

At this point, the emergence of the new threat of Danish intervention meant that Emperor Ferdinand II needed a new army. Unhappy about his dependence for troops on the Estates and the Catholic League led by Maximilian of Bavaria, the Emperor gladly accepted a proposal from the Bohemian magnate Albrecht von Wallenstein to raise a separate Imperial army. A wealthy and skilled administrator, Wallenstein managed to raise an army in just a few weeks of 1625, which included 7,600 mounted troops organized into 17 regiments (9 of harquebusiers, 5 of cuirassiers, 2 of dragoons and 1 of Croats). The cavalry was expanded during 1626 to 26 regiments, numbering 11,940 men, and over the following four years the number of regiments remained at around 30.

After the dismissal of Wallenstein the army was reduced again. The new Imperial commander Graf Tilly had just 6 cavalry regiments in his camp at Magdeburg in November 1630–May 1631: Holk (400), Böninghausen (500), Harowrat (300), Corona (400), Balthasar Maradas (300), and 200 Croats under Isolani, totalling 2,100 men. At the same time an additional 1,600 men forming 5 regiments were encamped near Dessau: Altsächsische (300), Bernstein (400), Colloredo (400), Piccolomini (200), and 300 Croats. This grand total of 3,700 Imperial cavalry was augmented by 2,750 Bavarians also under Tilly's direction.

The Swedish phase: the defeats of 1631–32

At the battle of Breitenfeld on 17 September 1631, Imperial cavalry made up the bulk of Tilly's Imperial League army. The left wing under Pappenheim was wholly cavalry, being composed of 7 Imperial cuirassier regiments – Bernstein, Merode-Varoux, Neusächsisch, Piccolomini, Rangoni, Strozzi and Trčka. In the centre were 5 harquebusier regiments – Caffarelli, Colloredo, Coronini, Haveaucourt and Montecuccoli – while on the right were the cuirassier regiments Altsächsische and Wengersky. Across the front,

Isolani's Croats and the independent dragoon companies fought as the skirmish screen. The battle was a disastrous defeat for the Catholic troops. With the 72-year-old Tilly's recovery from his injuries far from certain, and the army in disarray, Emperor Ferdinand II was left with no choice but to reappoint Wallenstein to command.

Returning to the Imperial army in spring 1632, Wallenstein again set about raising new regiments in a matter of weeks. According to Wrede, the number of cuirassier regiments was increased from 24 to 28, harquebusiers from 13 to 19, dragoons from 11 to 14, and Croats from 6 to 10 units. Even after defeat at Lützen in November 1632, Wallenstein's cavalry was still numerous: according to Allmayer-Beck and Leesing, 31,000 men in 28 regiments of cuirassiers and 16 of harquebusiers, together with an additional 5 of harquebusiers in the Hungarian theatre. Wallenstein also deployed just under 5,000 dragoons in 11 regiments, and 6,000 Croats in 10 others. A further 12 independent companies provided the troopers from which he and his commanders drew their Leibgarden (personal bodyguards).

However, the sheer scale of the Thirty Years' War meant that the cavalry had to be dispersed all over central Europe. At the battle of Hessich-Oldendorf (July 1633) the Catholic army had just 2,660 Imperial and 1,145 allied League cavalry. General Johann Merode-Varoux commanded three regiments – d'Asti (300 men in five companies), Wippart (650 men in ten) and Rittberg (195 men in three companies). The reserve, commanded by Gen Lothar Dietrich Bönninghausen, numbered 7 regiments – Quadt (200 men in five companies), Westfallen (520 men in 13), Horst (270 men in six), Wartenberg (320 men in eight), Byland (160 men in four), Pallant von Moriamez (200 men in five) and Ohr (450 men in ten companies) – together with Bönninghausen's own 100-strong Leib company; Gen Gronsfeld led 600 dragoons of the Merode regiment. This battle saw Merode killed, together with many of the Walloons he had recruited, in a pointless charge against a considerably larger enemy force.

Harquebusier's breastplates, and burgonet and morion-style helmets, on the shelves of the Graz Landeszeughaus (Armoury). A deep gorget, ringmail sleeves and gauntlets would complete the protective armour for a mounted harquebusier. (LZH)

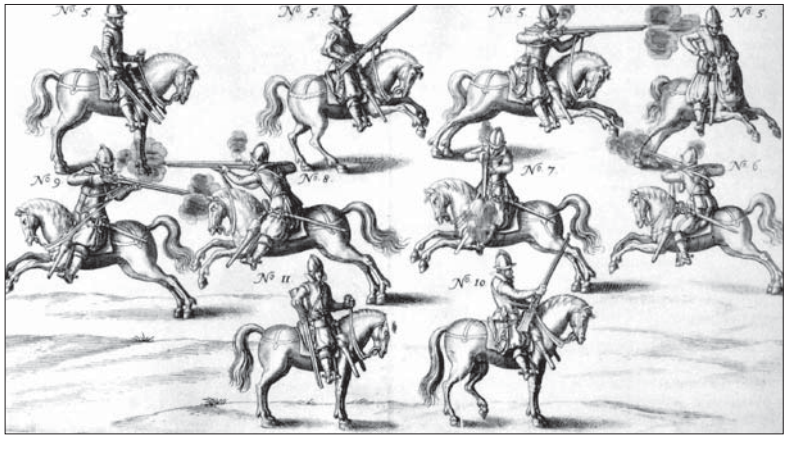
The French phase, and the final years: 1635–48

After Wallenstein's assassination in February 1634 the cavalry continued to expand, from 75 regiments in 1633 to 84 in 1634, and 93 in 1635, although the number of companies in each regiment initially varied widely. In March 1634, the Croat regiments provided Isolani with ten companies, Corpes with nine, Forgach seven, Losy ten, Kopetzky eight, Revery five, and Pziokowsky nine companies. The regular regiments would vary from Ahfeld, with 13 companies, through the near-standard regiments of Alt- and Neu-Piccolomini totalling 23 companies and the Alt-Sachsen cuirassiers with ten, down to the Piccolomini dragoons with six, Maradas cuirassiers with four, and Toretta harquebusiers with just two companies.

However, reallocation of troopers and extra recruiting meant that by September 1634 the cavalry in the army newly assembled by King (later Emperor) Ferdinand III in Germany had achieved a much greater standardization, in 23 regular regiments composed of 189 companies. The 17 cuirassier regiments – Strozzi, Spinola, L. Gonzaga, Cronberg, Aldobrandini, Neu-Florentine, Nicola, Streithorst, Mühlheim, Vitzthum, Neu-Piccolomini, Alt-Piccolomini and S. Piccolomini – were mostly at ten-company strength, together with H. Gonzaga (six companies), Rauchhaupt (four), Harrach (nine) and Gallas (three companies). The 4 harquebusier regiments were St. Martin (five companies), Rittberg (nine), Loyers (ten) and Toretta (two companies), plus the dragoon regiments Piccolomini (ten) and Herrero (one company). In addition, of the 7 Croat regiments, 6 had ten companies – Isolani, Losy, Prichowsky, Corpes, Batthyani and Raikowitz – and Forgach had eight. Around 7,000 troopers of the Strozzi, Spinola, L. and H. Gonzaga, Aldobrandini and Rittberg regiments fought under Gen Gallas in the victory at Nördlingen that month. In other theatres, the Imperial cavalry deployed another 16 cuirassier, 11 harquebusier, 13 dragoon and 9 Croat regiments, bringing the total to 79 cavalry regiments in Imperial service.

After the highpoint in 1636, when there were 101 regiments, cavalry strength began to decline steeply, and in 1642 the number of regiments fell from 80 to 63. At Second Breitenfeld that November the Imperial right wing facing the Swedes was made up of the Missling, Alt-Piccolomini, Brug, Montecuccoli, Speereuter, La Corona and Neu-Piccolomini regiments in the first line, together with Münster, Bonneval, Nassau, Kapaun, Ramsdorf, Lüttich, Spiegel, and one Bavarian regiment in the second. The remaining cavalry on the left were, in the first line, the Pompei, Madlo, Gonzaga, Vorhauer, Weintz, Kraft, Jung, Heister, Alt-Heister and Nicolo regiments; and in the second line, Burgsdorf, Kastenbeck, Warloffski, Koch, Gall and Schleinitz. In addition, six squadrons of Croats and eight of Hungarian hussars guarded the extremes of both flanks.

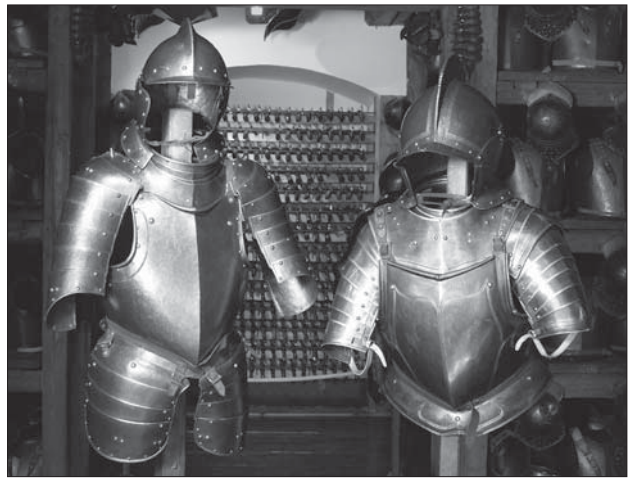
The number of regiments fell to 49 in 1644, but in one of the last major battles of the war, at Jankau in February 1645, both Imperial wings were wholly composed of cavalry. The right, under Gen Werth, was made up of Alt- and Neu-Piccolomini, Henot, Pallavicini, Gonzaga, Bruys, Werth and Topf, while Feldmarschall Götz commanded the left with the Sporck, Gelling, Fleckenstein, Kolb, La Piere, Pompei, Traunitz, Hatzfeld, Bock, Waldek and Nassau regiments.



A plate from Johann Wallhausen's *Kriegskunst zu Pferdt* ('The Art of Mounted Warfare') of 1616, showing harquebusiers firing from horseback.

While the number of cavalry regiments rose again to a stable 54 in 1646–47, in the last year of the war the Imperial cavalry had just 46 regiments; the harquebusiers had disappeared entirely, leaving just 38 cuirassier, 4 dragoon and 4 Croat regiments. After the Peace of Westphalia

brought the long and ruinous wars to a close in 1648, all these surviving units except 9 of cuirassiers and a single dragoon regiment were disbanded.



Two sets of harquebusier armour of officer's quality, with combed helmets, gorgets, cuirasses – (left), complete with short tassets – and laminated upper arm protection. (LZH)

CUIRASSIERS

Organization

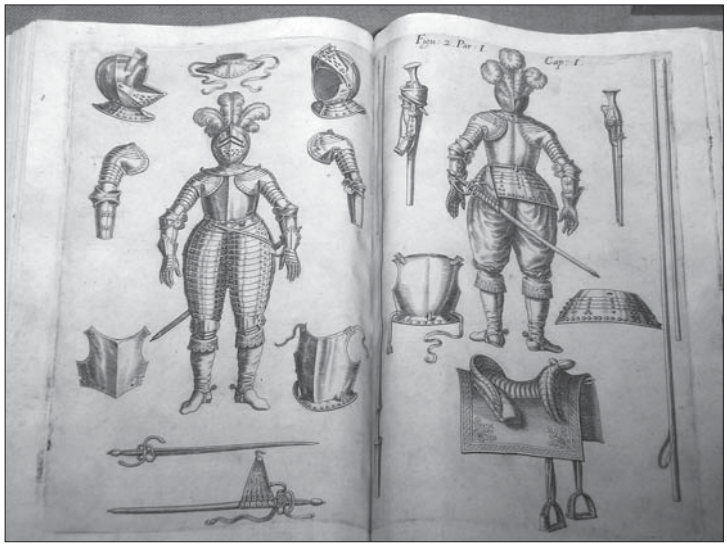
The Imperial army entered the Thirty Years' War with just one cuirassier regiment, but their number gradually increased over the first nine years of the conflict to reach 11 regiments in 1627. Partly by upgrading harquebusiers, the number of regiments then grew rapidly, to 24 by 1631 and 38 by 1633. Within just another two years, 58 regiments were in Imperial service, reaching a peak of 61 in 1641. Over the next two years the number contracted significantly, but then levelled off at around 40 regiments for the last five years of the war. All of the regular cavalry regiments, including the cuirassiers, were organized in a headquarters and field companies.

Armour

The armour of cuirassiers was initially very similar to that of 16th-century knights, but functionality and cost led to a gradual reduction during the 17th century, first in quality and later also in quantity. However, its weight greatly increased, in an attempt to provide full protection against increasingly powerful firearms; armour had to be tested ('proofed') against full-velocity musketballs. The extent of the proofed area would vary: some suits were made to provide full protection to the front, and consequently were very heavy, weighing on average about 25kg/55lb, but possibly as much as 40kg/88lb; more commonly, however, only the breastplate was proofed.

The full suit became increasingly rare, not only because of its weight but also because of changes in tactics, which required greater manoeuvrability from the individual trooper. Until the midpoint of the Thirty Years' War a cuirassier was ideally protected from head to knee in three-quarter armour, usually blackened to prevent rust. In addition to the breast- and backplates, they wore helmets of varying types, usually Hungarian 'lobster-tail' or burgonets, which could withstand a pistolball. One late type of plain, closed burgonet, common among cuirassiers, had a mask-like visor with small slits for the eyes, nostrils and sometimes the mouth; from its supposed resemblance to a human skull, the Germans referred to it as a *Totenkopf* ('death's-head') helmet, although it was also known less dramatically as a Savoyard helmet. The neck was protected by a gorget, the arms by pauldrons, couters and vambraces, and the hands by gauntlets. The thighs were covered by articulated tassets ending in knee-pieces, which met the tops of the thick leather knee-length spurred boots.

Armour was so expensive that only a few Inhabers could afford to equip an entire regiment, but the authorities continued to take the view that some armour was worth having. After poorly armoured Imperial

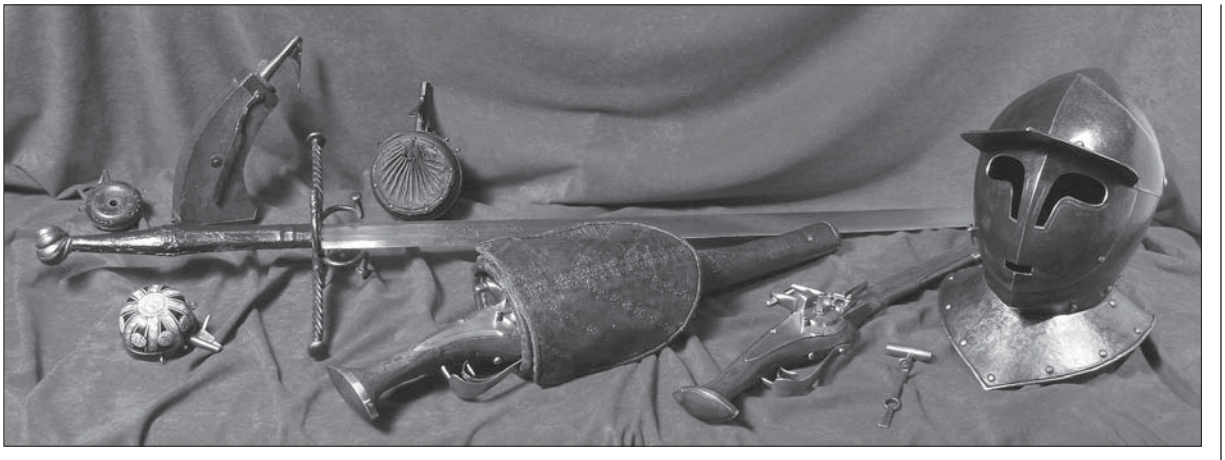


Front and rear views of a cuirassier's armour, weapons and saddle, from Wallhausen's *Kriegskunst zu Pferdt*, published immediately before the outbreak of the Thirty Years' War. Note that the armament still includes a lance in addition to the sword and saddle-pistols.

cavalry joined in the panicked flight from the field of Lützen in 1632, Wallenstein noted in a letter to the Bavarian Gen Aldringen: 'In the battle of Lützen the difference between armoured and unarmoured cavalrymen could be observed clearly; the former fought, the latter took flight. Therefore, over the winter, all colonels should equip their cavalry with cuirasses.'

Although Imperial cuirassiers were always better armoured than their adversaries, the growing demand to fit out large standing armies at low cost resulted in production of 'munition armour', which was of low quality and also reduced the influence of contemporary civilian fashion on the design. The former 'peascod' profile of the breastplate became flatter, although it retained a distinct central vertical ridge extending to a sharp point at the lower edge, as this to some extent deflected musketballs. In contrast, the tassets did become larger and more bulbous to reflect contemporary fashion; this gave greater protection to the upper leg, which was more in the line of musket fire. Decoration became less frequent, while the plate itself was more usually blackened than burnished; however, officers' armours were more fashionable, usually decorated in various styles with engraving, embossing and chasing (which did not affect the strength). Only the wealthiest could afford the highest quality armours, with gilded or silvered inlays of mythological scenes and foliate patterns; these were produced by a few master-armourers, mostly working in the court armouries.

The improved firearms of about 1630 onwards brought about a corresponding decline in the use of armour, and by the 1640s only relatively small numbers of cuirassiers retained the original suit. As early as 1632, the Swedish cuirassiers on their left wing at Lützen were mostly wearing just a *zischagge* helmet with a breast- and backplate over a leather buff-coat, while their Imperial counterparts were still largely in the full three-quarter armour. The last large batches of this type were produced and delivered to the Imperial arsenal at Graz in 1635, but by then the Imperial cuirassiers, including their officers, were abandoning what they viewed as excessive equipment, retaining only the essential pieces to form a 'half-armour' to protect the vital head, torso, and sometimes hands. An illustration from the *Theatrum Europeum* of the battle of Rheinfeld in 1638 shows cuirassiers wearing both three-quarter armour and the minimum set of open helmet with breast- and backplate. By 1640 the Obristleutenant of the Alt-Piccolomini regiment was writing to his Inhaber seeking permission to discontinue the use of full armour, which was already worn only by a minority of the unit, on the grounds that it was too heavy for use in continuous campaigning. Permission was apparently granted, since the following year only 127 of the 727 men in the regiment still wore armour. In another illustration from the same year, showing the siege of Bad Kreuznach by Gen Gilli de Haes, Imperial



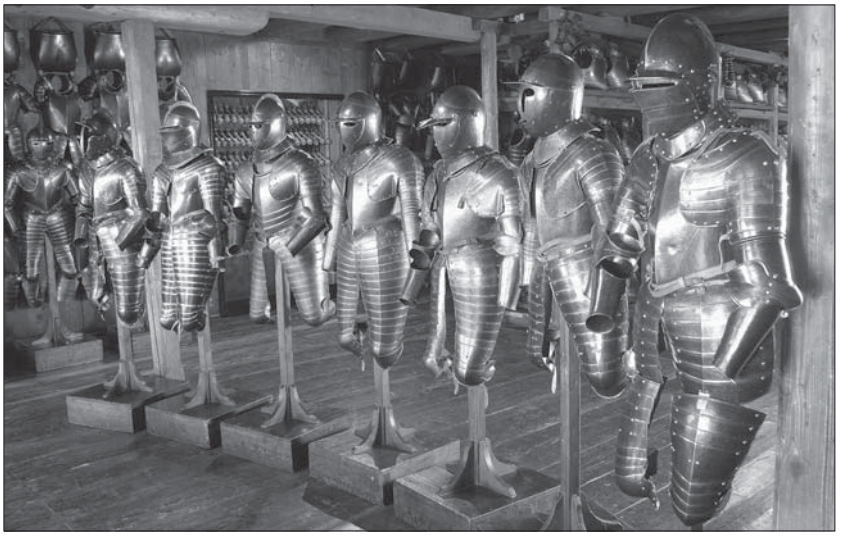
Fine surviving examples of the weapons of a cuirassier. (Left to right:) small round priming and larger bullet-dispensing flask; powder flasks; a long, heavy, two-edged broadsword of a 16th-century style; a pair of wheellock pistols carried in saddle holsters, and a wheellock spanner. At right is a burgonet helmet with a *Totenkopf*-style mask visor. (LZH)

cuirassiers have completely abandoned three-quarter armour. The gorget, which had previously been worn to protect the neck, was now only worn by officers as a symbol of their rank.

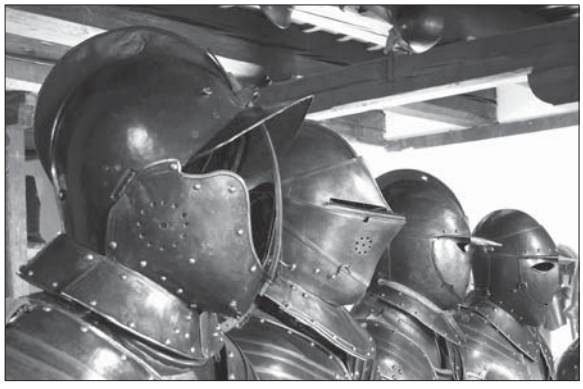
Weapons

Cuirassiers were divided into two groups, depending on their main weapon. A dwindling number were still armed with the heavy cavalry lance, which had been disappearing since the beginning of the 17th century. This was 3–4m/10–13ft long, and usually carried vertically, with the butt end supported either in a stirrup-bucket or between the boot instep and the stirrup arch. When the charge was sounded the lances would be lowered: the first two ranks charged with their lances horizontal, while the third to sixth ranks lowered theirs more gradually, and the last two ranks kept their lances upright.

As this weapon fell into disuse, the other category of cuirassiers became more important. Their main weapon was a pair of wheellock pistols, used initially for 'caracoling' and later for close engagement. These were carried in holsters fastened each side of the front of the saddle. During the wars, wheellock pistols developed from late 16th-century style *Puffers*



Seven suits of cuirassier armour with helmets of varying types, mostly closed burgonets. At far right is a burgonet fitted with a 'falling buff' or 'Hungarian visor'; note also the two-part tassets, with the removable lower section and knee-pieces attached to the upper thigh lames by straps. (LZH)



Four cuirassier helmets. (Left to right:) an open burgonet with cheek-pieces and movable nasal bar; an armet of 15th-century design, with a falling visor – probably Hungarian; and two closed burgonets with mask visors. (LZH)

to longer weapons, as the barrels were extended from 30–35cm to 40–50cm (11 to 20in). The butt pommel also changed from a ball to a lemon- or egg-shape by 1615–20 (a style fashionable in southern Germany), and then to a broad 'fishtail' in the 1620s.

All cuirassiers were armed with a straight sword designed for both piercing and slashing. At the beginning of the wars the heavy cavalry sword in the widest use was a long, double-edged weapon dating from the last quarter of the 16th century, with straight or S-shaped quillons and finished with side-rings on both sides. These swords were further developed as other styles came into widespread use among all types of European cavalry. The cutlass had a characteristic simple shell hand-guard. Of southern German origin, the *sinclaire* was one of the earliest basket-hilt designs, with extended quillons and a large triangular guard plate, very similar to the style used on common daggers, albeit decorated with pierced hearts and diamonds. The *épée wallone* (Walloon sword) was characterized by a strong knucklebow formed by extending the rear quillon upwards to meet the pommel, and by two pierced 'fishnet' guard plates at the sides. A more stylish hilt than the Walloon, which was developed from the civilian rapier popularized by the Imperial general Gottfried Heinrich Graf Pappenheim, led to the lighter 'Pappenheimer' sword; this had straight or S-shaped quillons and pierced plates, but provided greater protection to the hand with an open basket-style guard formed with additional bars and side-rings.

Tactics

The cuirassiers formed the main strike force on any 17th-century battlefield. However, the lance had become ever less effective against better-trained infantry in formed blocks, armed with firearms and protected by pikes. Although the aim remained to break up these tight masses so that the cavalry could wield their swords once inside a broken mob, the initial attack was increasingly delivered with pistols.

During the 16th century, the 'caracole' tactic had evolved in order to break the infantry mass without direct contact. Originally, the caracole (Spanish, 'snail') was a light-cavalry tactic, by which pistoleers would attempt to disrupt infantry blocks with a steady, rolling fire before the lance-armed cuirassiers launched the decisive charge. The pistol-cavalry would line up in columns at least six ranks deep and anything from six to 20 files wide, before advancing at a slow trot towards the enemy, and halting. The front rank would advance to about 30m/yards' range, turn their horses to the left, and fire their pistols; then they would return to the rear of the formation to reload, while the next rank advanced. This process of successive firing by rank would continue until it became clear whether the target infantry would stand or break; if the enemy formation showed signs of collapsing, the lance-armed cuirassiers would charge. However, this tactic was never really effective. It was cumbersome and slow; in many cases insufficient firepower failed to produce much effect; and as infantry muskets improved the pistols were soon outranged, exposing the cavalry to a heavier, more disciplined return of fire.

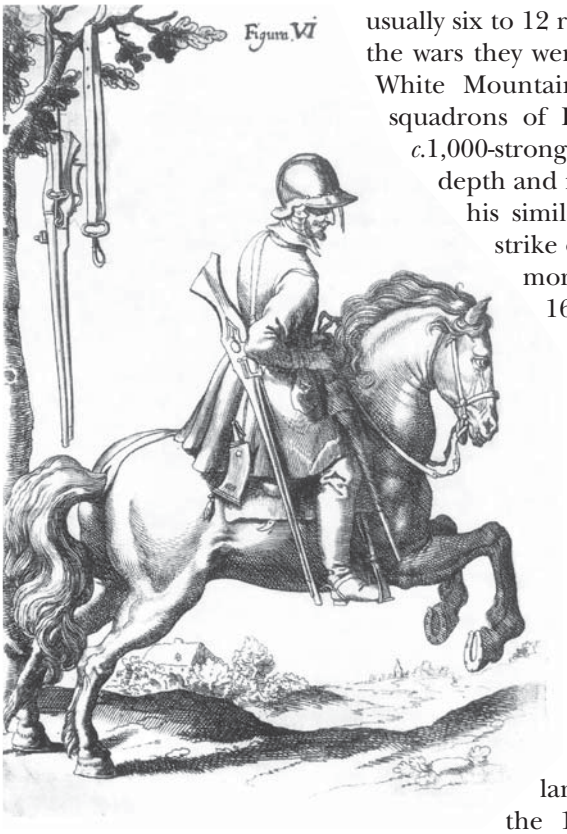
The caracole had thus fallen out of use by the Thirty Years' War, but cavalry continued to use pistols in a different way. As part of the cavalry charge, the front two ranks would fire their pistols at close range before drawing their swords; the following ranks would have the choice of either following them into the mêlée with drawn swords, or firing their pistols in their turn. As armour fell out of use in the 1630s, experienced Imperial commanders such as Raimondo Montecuccoli favoured charging sword in hand, and reserving the pistols for use once amongst the enemy troops.

Many authors have claimed that variants of the caracole remained in tactical use well into the 17th century, but this was now just a name given to a variation of the new charge tactic, by which the lead ranks would fire their weapons and draw aside to allow the following ranks to charge with the sword. Alternatively, it has been wrongly used to describe situations where cavalry with low morale opted for 'firing and retiring' rather than charging home. A number of early 17th-century military manuals never mention the word; when Giorgio Basta, an Imperial cavalry general, wrote a work on cavalry in 1612, he was answered by Jacob von Wallhausen four years later, but neither author discussed the caracole. Hermann Hugo, who wrote a history of cavalry in 1630, only mentions the caracole as being used by harquebusiers against infantry.

With the lance and the caracole abandoned, cuirassiers were trained to hold their fire until at close quarters. All cavalry were now trained to commence their advance at the walk, before speeding up to a trot and firing any weaponry, and then spurring their horses to a gallop for the final phase of the attack. This method did require greater bravery and considerably more training, and poorly trained troopers probably failed to move into the last phase, preferring to retire in the face of the enemy. By contrast, it probably appealed to well-trained and motivated cavalry, as they were once again charging into the enemy formations. As the wars progressed, these tactics were increasingly employed. At Breitenfeld, Tilly's cuirassiers launched ferocious charges at the Swedish horse. At Lützen, Piccolomini stated that his cuirassier regiment had charged the Swedes eight times in succession. During one of these charges, an Imperial mercenary cuirassier named Sydenham Poyntz records how Piccolomini's cuirassiers blew a gaping hole through the Swedish king's Finnish cavalry. In the same battle, Imperial cuirassiers, together with infantry, practically destroyed the elite Swedish Blue Brigade: as the Swedes advanced against the Imperial centre they were pinned down by Comargo's infantry regiment to their front, and simultaneously charged in both flanks by cuirassiers.

All that remained of 16th-century tactics were the dense block formations of big armoured men on tall horses,

Harquebusiers at the fall of Budissin (Bautzen) in September 1620. Note the trumpeters and standard, and the commander in a plumed hat carrying a war-hammer as a symbol of his status. (*Theatrum Europeum*).



Archiburgiero **(Italian for harquebusier), depicted in *L'esercito della Cavalleria* by Della Croce. Note the harquebuse suspended from the sling over his left shoulder, and details of the sling, snap-hook and ring-and-rail fitting shown at top left. What appears to be a ramrod for the harquebuse is visible in front of his boot below the pistol holster.**

usually six to 12 ranks deep and six to 20 files wide. At the beginning of the wars they were divided up into somewhat smaller squadrons, as at White Mountain in 1620, where they were supported by larger squadrons of League cavalry. Later, Pappenheim would form his *c.*1,000-strong cuirassier regiments in ten files of 100 men, stressing depth and narrowing the front. In contrast, Wallenstein deployed his similarly sized units in six ranks, emphasizing the initial strike over a wide frontage, and his method soon proved the more successful. While held prisoner by the Swedes in 1639–41, Montecuccoli wrote several military treatises, in which he proposes that Imperial cavalry formed blocks in four or five ranks; he also recognized the changing realities, emphasizing that the Imperial cavalry should take position on the flanks of the infantry and in reserve at its rear.

HARQUEBUSIERS

Organization

The 17th-century harquebusiers had their origins in the *Reiter* (mounted men-at-arms), which had increasingly begun to replace heavily armoured and lance-armed knights in Western European armies during the 16th century. They were ahead of their cuirassier counterparts in wearing only helmets and cuirasses, together with a limited amount of protection on the arms and upper legs, over thick leather clothing and boots. As firearms became lighter and more reliable, these troops adopted them as their primary battlefield weapon. A Reiter would usually be equipped with a pair of pistols and a sword, but increasingly would also use a longer firearm known as a *harquebuse* (or later, carbine), which was a short wheellock musket measuring about 90cm/35in long.

By the outbreak of the Thirty Years' War a separate class of cavalry known as harquebusiers was emerging; in addition to their longer and therefore more accurate firearm, they enjoyed the advantage of being somewhat cheaper to equip and mount. Most contemporary military literature described them as 'light' cavalry, but Imperial harquebusiers remained tactically part of the battle cavalry, since their main roles were to provide fire support for cuirassier charges and also to emulate them in engaging in close combat. Their organization also followed the cuirassiers, in regiments of five to ten companies each of 100 men.

At the beginning of the wars the Imperial army had only one harquebusier regiment; another was raised during 1618, and thereafter their numbers rapidly expanded, to 14 regiments in 1620 and 17 the following year. As a result of the army reduction in the early 1620s their numbers were slightly reduced, but once Wallenstein was in charge the number of regiments rose again, to a peak of 20 in 1633. Defeat at Lützen, and particularly the participation of poorly armoured cavalry in the *Fahnenflucht* flight from that field, produced a dramatic transformation in the Imperial cavalry, which now increasingly relied on

shock effect. Some harquebusier regiments were already better equipped than cuirassiers, especially if they had rich proprietors such as Piccolomini; as a reward for services, that officer was allowed to upgrade his harquebusier regiment to cuirassiers, and to raise another cuirassier regiment – this upgrading enhanced an Inhaber's social status. In this way several other harquebusier regiments were transformed into cuirassiers. At the same time, the dragoons were increasing in number, and were fulfilling the harquebusiers' main role of providing fire support to other parts of the army. Consequently, the number of harquebusier regiments declined rapidly, to just 5 in 1635; no new units were raised after 1642, and the type had vanished from army lists by the end of the wars.

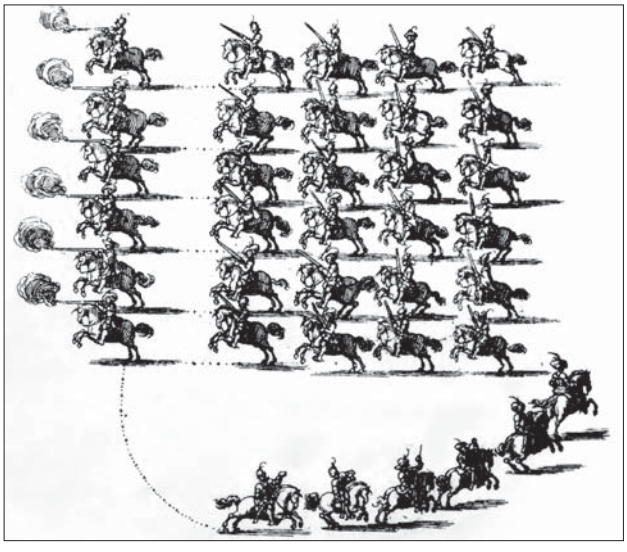
Armour and weapons

Working usually at greater distance from the enemy, harquebusiers always had less need for armour than cuirassiers, but the distinction became blurred as cuirassiers reduced their own protection. The harquebusiers initially wore breast- and backplates, sometimes with gauntlets, and an open helmet; surviving breastplates show the impressions of 'proofing' pistolballs fired at 20 paces. Later in the war they too reduced their armour, abandoning the backplate, and in some cases wearing just a thick leather buff-coat. The open helmets were of a variety of common styles, including the burgonet, morion, Birnhelm, and lobster-tail zischagge with a sliding nasal bar. High leather riding boots provided the leg protection. They carried the harquebuse or carbine slung on a crossbelt to which it was attached by a sprung *Karabinerhaken* ('carbine hook') – a word still surviving in European languages, e.g. as the mountain-climber's karabineer. In addition to a common pattern of heavy sword, they carried a pair of wheellock saddle pistols, together with the necessary accessories including priming and powder flasks, a bullet pouch or flask, and a wheellock spanner suitable for two different lock sizes.

Tactics

The only vestige of the caracole tactic survived among these troops, as they would usually employ their firearms against the enemy infantry

The armament of a harquebusier. Below the short, smoothbore wheellock harquebuse are a broadsword with S-shaped quillons, and a pair of wheellock pistols. Note that the holster housing has evolved from the folding protective extension of the holster, as illustrated by Wallhausen on page 18, into a separate, stiff, decorated flap – compare with Plate B3. The open-faced helmet has the bowl drawn up into a large, morion-style comb. (LHZ)



The harquebusiers' caracole depicted in 1630 – the last use of this tactic, originally practised by heavy cavalry pistoleers. After discharging their main weapon the front rank wheels away as the second ride forward into firing position. (Hugo, *De Militia Equistari...*)

to soften them up for heavy cavalry charges; they would approach and fire their harquebuses at longer range, before closing in to use their pistols. As their numbers grew they were increasingly formed up in deep masses like the cuirassiers, and would consequently fire by successive ranks to disorder the enemy before galloping in to engage with sword or pistol. Unfortunately, rather too many harquebusier units proved reluctant to close with the enemy after firing, and earned a bad reputation as a result. In his already-quoted letter to Aldringen after Lützen, Wallenstein proposed to stamp out this last manifestation of the caracole: 'After firing, they turn their backs and retreat, which causes much harm'.

DRAGOONS

Origins and organization

Dragoons owed their origins to the occasional practice in 16th-century France of transporting infantry by horse when rapidity of manoeuvre was required. Although there were other, earlier instances of improving infantry mobility by this means, according to older German literature dragoons had been devised by Graf Ernst von Mansfeld, later one of the leading German military entrepreneurs of the Thirty Years' War. Mansfeld, who had learned his profession in Hungary and the Netherlands, certainly formalized the use of horses to make his infantry more mobile, creating an '*armée volante*' (flying army). The term dragoon (German, *dragoner*) first appears at the beginning of the 17th century; various more colourful theories for its origin have been advanced, but it probably derives from the German or Dutch *tragen* or *dragen*, 'to carry'.

Dragoons were musketeers mounted on horses to march with the cavalry, who fought either mounted or on foot. They formed a distinct combat arm, and contemporary army lists refer to 'horse, foot and dragoons'. Combining the firepower of infantry with the mobility of cavalry, these multi-purpose troops could both advance alongside cavalry and hold positions alongside infantry. They were also regularly employed on scouting and picket duties, and were well-suited to 'internal security' duties, protecting lines of communication or guarding key points. Their combined capabilties also made them the usual choice for surprise attacks on smaller forts or enemy encampments.

The first dragoons in Imperial service can be traced to 1602, when Archduke Matthias offered to his brother, Emperor Rudolf II, to raise four companies of '*draconische Pferd*' from 400 survivors of Tilly's Walloon infantry regiment, which had been decimated in the recent Turkish war. Although intended to be disbanded in 1605, this unit still existed in 1608,

(continued on page 33)

CUIRASSIERS, 1618–c.1630
1: Cuirassier in 'Totenkopf' helmet
2: Cuirassier-lancer
3: Cuirassier officer in Italian armour

CUIRASSIERS, c.1630–48
1: Cuirassier in half-armour
2: Cuirassier cornet, De Capua regiment
3: Cuirassier, c.1648
1
2
3

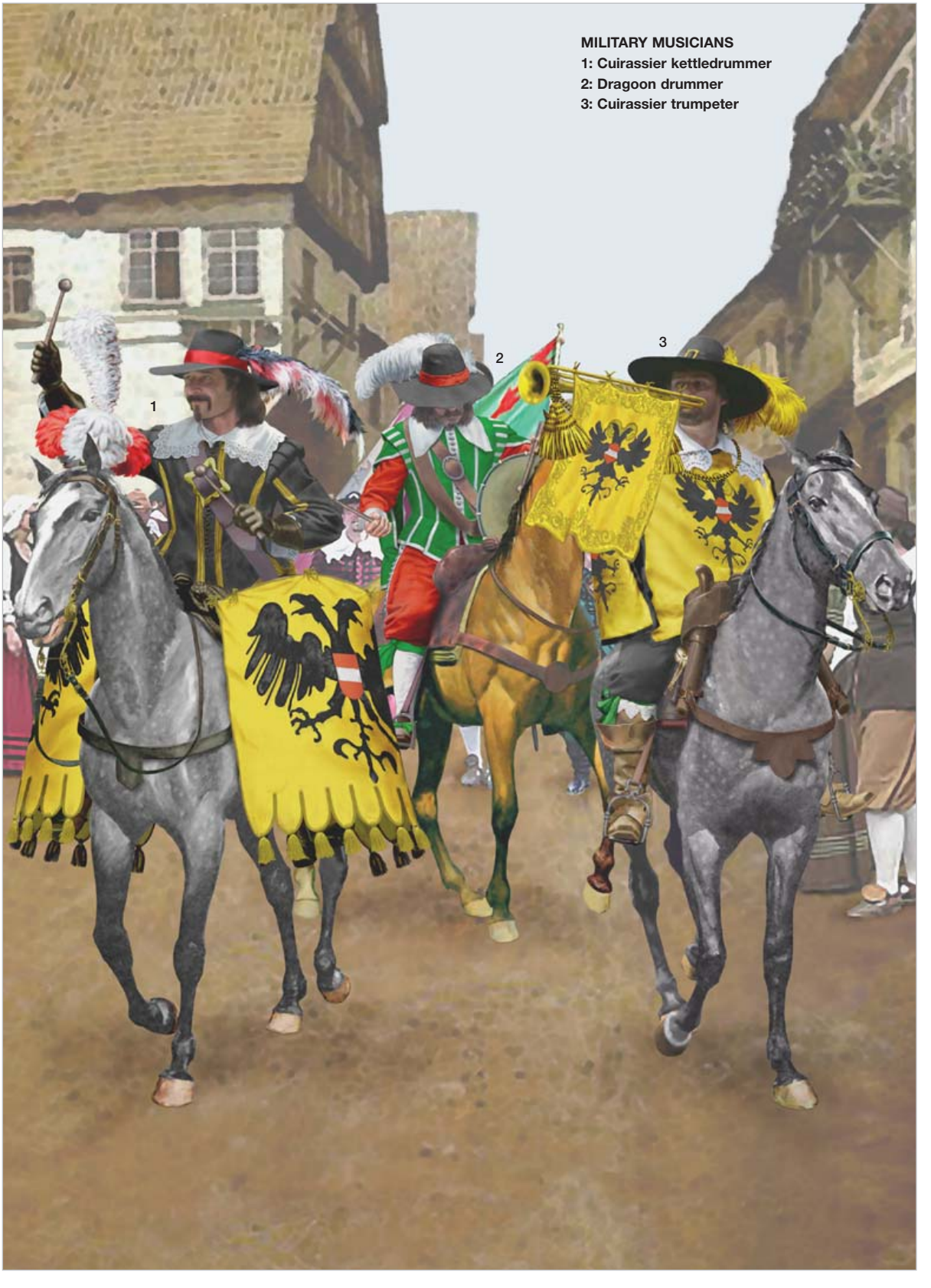
HARQUEBUSIERS, 1618–c.1630
1: Harquebusier, early 1620s
2: Harquebusier, c.1630
3: Harquebusier officer, 1620s
1
2
3

HARQUEBUSIERS , *c.*1630–48
1: Harquebusier, *c.*1648
2: Harquebusier, *c.*1635–40

DRAGOONS
1: Dragoon
2: Dragoon officer
3: Dragoon ensign
1
2
3
PRODEO ET PATRIA

CROATS
1: Croat harquebusier
2: Croat officer
3: Croat standard-bearer, Isolani's regiment
4: Croat in traditional dress
1
2
3
4

HUSSARS & POLES
1: Hussar officer
2: Hussar lancer
3: Polish *Kozak*
1
2
3


MILITARY MUSICIANS
1: Cuirassier kettledrummer
2: Dragoon drummer
3: Cuirassier trumpeter
1
2
3

with a strength of 800 men and the requisite horses. In his commission certificate as a captain of four companies of *Dracones,* Laurentio de Ramée is instructed that his future command must all have good horses, efficient weapons in the shape of a long-barrelled firearm with a bandolier, together with a pistol or short-barrelled weapon in a holster, and all the necessary accessories required for a fully equipped dragoon on their belts.

In 1612 the Imperial general Giorgio Basta describes dragoons as mounted shot troops armed with a musket or carbine, but without armour for the sake of speed of movement – he criticizes the officer who armours his dragoons. He states that, aside from a sword, the dragoon must have a 3ft-long musket, which shoots an ounce of lead, and in place of a powder flask he is to carry 12 complete cartridges in a leather bag on the right hip and another six in a small bag on the saddle. Basta also states that although they were often dismounted for action they should wear boots with spurs. In his work, he always describes dragoons as being armed with firearms. Writing in the 1670s, Raimondo Montecucculi still counts dragoons among the infantry, only differing in having horses for mobility; he states that they were armed with a musket slightly shorter and lighter than an infantry weapon, but also with a half-pike and sabre. According to him, the dragoons usually fought on foot. (The mention of half-pikes seems odd at a date when pikemen had become obsolete even among the infantry.) Many authors simply allude to the dragoons' similarity to harquebusiers, but lacking armour and with the capability of fighting on foot.

The early dragoons were organized not in cavalry companies or squadrons, but in infantry companies; their officers and NCOs continued to use infantry rank titles, and signals were passed by infantry-style drummers. The flexibility of these mounted infantry made dragoons an increasingly useful military type, which were also cheaper to recruit and maintain than the cavalry. However, dragoons were at a disadvantage when engaged against proper cavalry, so they were constantly seeking to improve their horsemanship and armament to raise their military and social status.

More dragoons appeared in the Imperial army in 1619 with the raising of the La Croix independent company and, in 1623, the Neuhaus regiment, but this was subsequently disbanded. However, during Wallenstein's second period of command (1631–34) many regiments were raised, just as the harquebusiers went into steep decline. In 1631 the Imperial army had no dragoon units; 4 new regiments were raised, followed by 7 more during the following year, and in 1635 they reached

The oldest known surviving dragoon guidon was made for a company of dragoons which, at the suggestion of Archduke Matthias, had been raised in 1603 from survivors of a Walloon infantry regiment formed the previous year by Johann Tserclaes, Graf von Tilly. It is of now-faded red damask, scattered with the usual 'triple flames'. On the reverse (left), St Michael battles with Satan, beneath the motto *SANCTE MICHEL ORA PRO NO* – 'Saint Michael, pray for us'. On the obverse is the cypher of Matthias of Austria, surrounded by a laurel wreath. The Archduke's crown with its heraldic points dates the guidon to before 1608, when Matthias became King of Hungary; he became successively King of Bohemia in 1611, and Holy Roman Emperor in 1612. (Armémuseum, Stockholm, ST 15:251; artist Hoffman-Jonsson; photographer Kjell Hedberg)

Two dragoons or carabineers firing wheellock guns on horseback; most dragoons would in fact have found firing from the saddle difficult, since they carried the same heavy matchlocks as infantry musketeers, with bandoliers of cartridges. (Basta, *Il Governo della cavalleria leggiera*, 1612)

a peak of 19 regiments, although most were understrength (some with only a single company). Later, it was prescribed that they adopt cavalry organization, with regiments of 1,000 men in ten companies, but this was not achieved in reality; some regiments managed to field seven or eight companies, but most had only three. The number of dragoon regiments also declined, to 10 in the period 1637–40, before stabilizing at 8 in 1646. At the end of the wars just 4 dragoon regiments remained, and all except one were disbanded.

Among the first four new units raised in 1631 was the Butler (later Devereux) dragoon regiment. The first 300 men were raised by its Obrist-Inhaber, Jacob Butler, who then increased the regiment to 1,000 in the following year. In 1633 command passed to the Irish Col Walter Butler, who was joined by some of his troopers in the assassination of *Generalissimus* Albrecht von Wallenstein in February 1634. Subsequently, the Butler dragoons absorbed seven companies from the Trčka regiment, whose Inhaber they had killed in this incident. The regiment fought at Nördlingen in 1634, and the following year the assassin Devereux took over as Obrist-Inhaber. In 1635 the regiment had to transfer five of its companies as a cadre for the newly raised Geraldin dragoon regiment, but over the next two years it absorbed the remains of the Fürstenberg and Walmerode regiments. In 1641, the regiment was disbanded and its survivors taken into the Gall cuirassiers.

Part of an illustration of Wallenstein's assassination on 25 February 1634, showing Imperial dragoons with helmets, high spurred boots, muskets and bandoliers. The Irish Col Walter Butler surprised and killed several of Wallenstein's key lieutenants, including Gen Adam Trčka, at Cheb Castle. A few hours later Capt Walter Devereux broke into Wallenstein's lodgings with six dragoons and killed him, while Capt Burgg with 31 other men from the regiment kept watch. (*Theatrum Europeum*)

Clothing and weapons

Reflecting their status, dragoons retained their infantry dress and always closely resembled foot musketeers. Most did adopt the fashionable cavalry hats, although some continued to wear infantry helmets. Initially they attached spurs to their infantry shoes, but these and the stockings were replaced gradually with boots. An illustration of Wallenstein's murder in 1634 (see herewith) shows dragoons wearing open helmets, leather coats and knee-length boots with spurs. In addition to a sword dragoons were armed with a matchlock musket, which was supported by a strap across the horse's back and a leather 'boot' for the butt on a strap extending from the right side of the saddle. In theory a dragoon could control his horse with the reins in his left hand and the burning

slowmatch in his right, but matches were not easy to handle on horseback, and dismounting to light them took up time. Initially, the musket was an infantry-pattern weapon, but gradually became shorter and lighter to resemble the harquebuse. Ammunition was carried either infantry-style on a bandolier of cartridges, or in a cavalry cartridge pouch. Only officers carried pistols and, as in the infantry, polearms such as partisans or halberds to signify rank. When dragoons were introduced into the Swedish army by Gustavus Adolphus early in the 17th century, he provided them with a sabre, axe and matchlock musket – an all-purpose set of equipment copied by other European armies. To tether the horse when fighting on foot, each man carried a small picket stake.

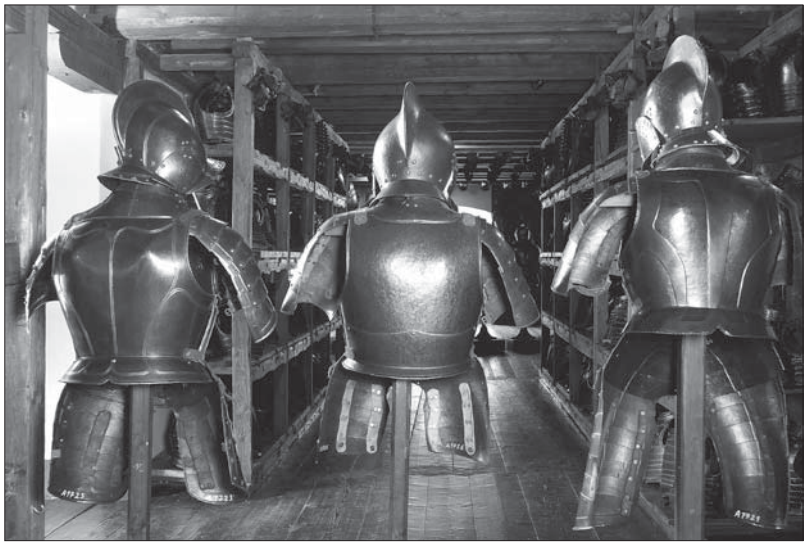
Tactics

Although they mainly fought on foot, dragoons were trained to fire from horseback and, sometimes, even to mount a charge. Their main mounted task was to provide fire support for the cavalry; in attack, they would soften up the enemy formation with their fire before the main body charged, and when their own cavalry was attacked by enemy cavalry they would also aid their colleagues with musketry. The early heavy musket made firing from the saddle ineffective if not impossible, but newer, lighter muskets and then carbines improved their battlefield performance, and thus their status among the cavalry. As well as firing from horseback, they could increasingly turn and manoeuvre like other cavalry, and even engage in some charges. When dismounted, dragoons would form up with a square of horses behind them; the reins of the one horse were thrown over the next one's head, and so on, until the last was held by a veteran horse-guard. Horses tied in this manner could not be unhitched quickly, so many horses were lost in hasty withdrawals. The horses ridden by the dragoons did not have to be of good quality, so were smaller and cheaper than other mounts.

INDEPENDENT COMPANIES

Alongside the formed regiments were many independent companies, organized either when insufficient troopers were enlisted to create a regiment, or from the remains of dissolved under-strength regiments. Independent companies originated from long before the Thirty Years' War, having originally been formed by the *Insurrectio* feudal levies, although they were increasingly used to guard the Military Frontier in Hungary and Croatia against the Ottoman Turks. Tasked with patrolling the border and guarding the fortifications, they were at that time unique in the Imperial army in being permanent formations; if their commander died, another was appointed. With the beginning of the Thirty Years' War this system of independent companies quickly spread to the Habsburgs' own Hereditary Lands, especially during active campaigns.

The companies usually numbered anything between 50 and 200 men. Employed on garrison and local guard duties, they were rarely taken into battle, though they sometimes formed the cadre around which new regiments were raised. However, away from the Frontier, these companies were often raised for a particular campaign or temporary military role,



Three sets of harquebusier armour from the early phases of the Thirty Years' War, seen from the rear. Such extensive protection would not long survive in widespread use. (LZH)

and – since not in these cases being responsible for guarding a particular locality – might be disbanded when no longer required. There were many different types of independent company, both of cavalry and of mixed troops, and in many cases these were expanded or merged to form new regiments rather than being disbanded.

Independent companies were recruited either from local populations or mercenary bands. As early as 1619, 7 independent companies (6 of harquebusiers and 1 of cuirassiers) were merged to form the La Croix regiment. The following year this regiment absorbed a dragoon company which their Inhaber, Jean de la Croix, had raised a year before for a campaign in Bohemia. After he was killed in the battle of the White Mountain in 1620, the regiment was disbanded and its companies were divided between the Dampierre and Auersperg regiments. Another example is the Scherffenberg harquebusier company, raised in 1621 by Rittmeister Seyfield Leonhard von Breuner with an initial strength of 100, which was later expanded to 150 harquebusiers and 50 cuirassiers. The following year it was reduced to 100 cavalrymen under Rittmeister Gotthard von Scherffenberg, but continued to serve in each subsequent year, respectively in Lower Austria, Bohemia, Moravia, Hungary, and finally, in 1626, in Upper Austria. There it formed up with the Löbl and Auersperg independent companies under the command of Löbl to fight in the suppression of a peasant rebellion. As a reward for their performance, these companies were merged to form the Löbl regiment in 1627. For the protection of the Vorlände (the Habsburg enclaves in Germany), Hanibal Graf Schaumburg raised a company of 200 cuirassiers in 1630, which survived until 1634 when, with the danger past, it was merged into the newly raised Mercy regiment.

Other independent companies were raised to act as elite bodyguards to protect senior commanders. The first such company was composed of cuirassiers for the protection of Feldmarschall Graf Buquoi in 1619, and served until his death at Pressburg in 1621. All cavalry types were employed as guards, or even mixtures of them – in this, Wallenstein's example was quickly followed by his subordinates. Wallenstein's first Leibgarde, in 1625, was composed of two independent harquebusier companies, Haugwitz and Simonetti, under the command of Obristleutenant Alexander von Haugwitz. According to Wrede, in 1627 it comprised four companies of 200 lancers, 150 harquebusiers, 200 Croats and 150 dragoons, commanded by Obrist Ottavio Graf Piccolomini. In 1630 the unit was expanded to ten companies, but was disbanded in the same year when Wallenstein was disgraced. On his reappointment to command in 1632 he raised another bodyguard, of

two companies of harquebusiers; after his assassination in 1634 this was likewise disbanded and incorporated into the Rittberg regiment. General Matthias Gallas had a lifeguard composed of cuirassiers, raised in 1633 in Zittau and expanded the following year to three companies, which participated in the fighting at Nördlingen. Two years spent on the Rhine and in Westphalia were followed by another two in Pomerania in northern Germany; by 1638 Gallas's guard consisted of one cuirassier and one dragoon company, but it was dissolved the following year.

Other independent companies were raised for the protection of convoys (not least, from their accompanying camp-followers), as regular units could not be spared for this task. In 1633, Obrist Proviant-Meister Hans Bernhard Herberstein raised such a company, which were described as cuirassiers (although that seems debatable, as they apparently did not wear cuirassier armour). After two years the company was sent to Gen Morozin's army at Frankfurt-am-der-Oder to be merged into a regular regiment. In 1636, Graf Herberstein raised another company for convoy protection, but this one too was soon incorporated, into the Zaradetzky harquebusier regiment based in Pomerania under Morozin. The other main task for independent companies was protection of the war-commissars (or more particularly, their treasure chests), but they also performed duty with the provosts in keeping military camps in order and manning recruiting stations.

LIGHT CAVALRY

The Habsburgs looked solely to the east for their light cavalry, recruiting Hungarians (although many also served in the heavier units), Croats and Poles. The first two originated from the Military Frontier, and consequently their kit and methods were designed to meet the Turkish threat – swift horsemen, few of whom wore any armour. The Croats had first been raised in the 16th century during the reign of Emperor Ferdinand I on the advice of Graf Ferenc Batthyány, Ban (Viceroy) of Croatia, since the Hungarians were considered unreliable. The position was not so different in 1618, when almost all Hungarian light cavalry joined the Protestant Prince of Transylvania, Bethlen Gábor, in his rebellion against the Habsburgs.

Croats at the battle of Lützen in 1632, from a painting by Pieter Snayers. The central figure facing out of the painting, wearing a red cloak and heavily bearded, is the colonel and later commanding general of all Croat troops, Hector Ludwig Isolani. (HGM)

Croats

The first 17th-century units were raised from Croat irregulars, and these were established and partly funded by local nobles required to guard the Military Frontier against the Turks. The Thirty Years' War would bring them into European wars for the

Sets of hussar armour on the shelves of the Graz Armoury; they consist of laminated breast- and backplates and gorgets. The hussar's protection would be completed by a 'lobster-tail pot' *zischagge* helmet with a sliding nasal bar, and either a long-sleeved ringmail shirt or just mail sleeves. (LZH)

first time, fighting for the Imperial army on a mercenary basis. Their long experience of frontier warfare, with its brief and bloody encounters with usually superior numbers, made them exceptionally useful light cavalry. Tough and experienced, they were led by daring commanders who were capable of rapid assessment of a developing situation, and decisive judgement. Each man was a skilled horseman and close-quarter fighter, who signed up for the duration of a military campaign, sometimes for a fee but more often for a share of any booty. They soon developed a reputation for making the most of any opportunity, most notoriously in the sacking of Madgdeburg in 1631. At first, these *Kriegsvolk* (loosely organized bands) were disbanded at the end of the military season, returning in the spring to rejoin their old commander or seek out new employment. Royal warrants almost always refer to them as Croats and Croat harquebusiers.

As the use of armoured cavalry declined, these natural light cavalrymen were signed up in larger numbers, and organized into companies ranging in size from 100 to a few hundred men, led by Croatian and later also Hungarian nobles, who all held the rank of Ober-Hauptmann (senior captain). Each year, several companies and then regiments were raised, including harquebusiers. As their numbers grew the name 'Croat' became synonymous across Europe with skilled, mobile light troops. The original Croats were soon joined by Hungarians loyal to the Habsburgs, and as the units expanded recruits were taken from across eastern European – Serbs, Transylvanians, Wallachians, Moldavians and Albanians from the Balkans were augmented by Poles, Cossacks and even Tatars.

The first regular Croat regiments were organized in 1625 by Wallenstein's light cavalry commander Hector Ludwig Isolani. They soon increased to 6 regiments, in addition to *ad hoc* units of irregulars, before climbing to 10 regiments in 1632, and reaching a peak of 19 in 1636. Since they could always be raised at need there was no incentive to make them permanent; by 1639 the number of regular regiments had dropped to 8, and throughout the 1640s it was down to 4 or 5 units. Regular Croat regiments numbered 500 to 1,000 men under an Obrist-Inhaber, who was responsible for their recruitment and pay. The regiment consisted of five to ten companies, each of 50 to 100 men under the command of a Rittmeister. Such was the impact of the Croats that other nations formed similar units – Bavaria from 1631, Spain from 1638, and France from 1635.

Hussars

Differentiating between regular and irregular units of Hungarian and Croat light cavalry has been difficult even for Hungarian historians, and is confused by nomenclature. In this period, the term 'huszár' meant any Hungarian cavalryman, of whichever branch. However, it usually refers to the lightly armoured cavalry which had come to prominence in Europe in the mid-16th century. Like the Croats, they were raised from irregulars on the Military Frontier, as mercenary bands organized by local nobles,

fighting alongside Hayduk infantry under an Ober-Hauptmann. As the Thirty Years' War began, 6 units each of 500–1,000 hussars – Esterházy, Pálffy, Forgách, Somogyi, Nádasdy, and the Raab hussars under Lengyel – were raised by local magnates in 1619. However, the number soon fell, and in 1624 the term hussar vanished from the army lists for a decade. It was only in 1630 that two new units were raised, joined by a third the following year. In 1632 Graf Stephan Pálffy raised 1,000 Hungarian (hussar-) lancers. Organized like their Croatian counterparts, the first regular hussar regiments were raised in 1634, and thereafter there were always two or three in Imperial service until the end of the wars.

Polish cavalry

The Poles formed one of the dominant military forces in Eastern Europe, and their cavalry were eagerly recruited as mercenaries on a regular basis by the Imperial army, not only for their military prowess but also for their Catholic religious zeal. Some 1,500 Polish 'Kozak' light cavalry under Col Kleskowski were already serving the Habsburgs at the White Mountain in 1620. Another contingent of 1,000 Polish and Kozak light cavalrymen were employed in 1623, but they were in most demand during Wallenstein's second command period. A regiment of 600 Polish hussars was hired in 1631, followed the next year by 6,000 light cavalry under colonels Czarnecki, Mörski, Wieruczki and Szczodrowski, who had been despatched by the Habsburgs' ally, the King of Poland. In addition, there were already a company of Polish cavalry under Schaaren in Bohemia, four under Götz and three companies under Schaffgotsche at Ilow, the last of which fought at Lützen as part of Pappenheim's corps. Another contingent of 3,000 Polish light cavalry was hired in 1635, but thereafter the numbers declined quickly. In 1640–41 just two regiments, Nouskowski and H(G)erlikowski, were in Imperial service. A mixed troop of hussars and Poles was briefly hired in 1643, and the last two units of Polish light cavalry under colonels Wurmb and Herlikowski were hired in 1645. Two years later they were expanded to 4,000 men, but suffered heavy casualties at Leobschütz. The survivors under colonels Schffelitzky and Przichowksi were stationed in Prague and took part in its defence in one of the last engagements of the Thirty Years' War.[3]

Armour and weapons

Many Hungarians continued to wear a ringmail shirt, and the eastern *zischagge* or *sisak* ('lobster-tail pot') helmet remained in general use. The more affluent officers could still be seen sporting fashionable late 16th-century armour: usually a breastplate, lobster-tail helmet and full arm protection, the cuirass often laminated and the whole set richly ornamented with gold and silver inlays. Although valued in close combat the helmet was heavy, and was steadily replaced by a thick, baggy cloth hat, which offered no

The favoured weapons of Croat and hussar cavalry. (Top to bottom:) an officer's mace; a war-hammer; an *estoc* longsword; a *Pallasch* broadsword; and a sabre. (LZH)

3 For further details see Richard Brzezinski's MAA 184 & 188, *Polish Armies 1569–1696 (1) & (2)*

Croats at the siege of Einbeck, 1641, from a painting by Pieter Snayers. Note (left, and centre background) the distinctive neckerchief; (left) a laminated breastplate; and (centre) the buttoned and corded coat, and a small axe. (HGM)

protection. Likewise, the left arm and back, no longer protected by the 16th-century shield, were now covered by a sheepskin worn slung over the left shoulder. As a sign of rank junior leaders would often wear a wolfskin, and senior officers, even when in armour, would wear a leopardskin, secured by a clasp or chain across the chest. A wide, tightly woven waistsash, wrapped round several times, gave some protection to the stomach and kidneys; worn by Croats and Hungarians, this sash in red or yellow developed into the first uniform symbol of their allegiance to the Habsburgs, although when it developed further into the famous barrel-sash it became more fashionable, as Inhabers selected their family colours. The Croats did not generally use armour, although some Croat harquebusiers did wear a simple breastplate secured by leather straps across the back. The Poles, especially their famous 'winged hussars', were heavier riders who did retain some mail and plate armour.

All three types of light cavalry were equipped with a mix of weapons. They carried Hungarian, Polish or Turkish-style curved sabres (*sablja* and *szablya*), *Palos* or *Pallasch* broadswords and *estoc* longswords, or, among the affluent, a *Panzerstecher* – a triangular- or cruciform-section sword up to 1.5m long, made of high quality steel with a sharp point for piercing mail. These longer weapons were carried under the saddle, usually on the right side. Other weaponry included maces, war-hammers and battle-axes. By this period most riders also had wheellock pistols carried in saddle holsters, and Croat harquebusiers additionally carried a short wheellock firearm snap-hooked to a shoulder sling.

Some Polish cavalry continued to carry bows and arrows in cases and quivers attached to the waistbelt, but the more widespread traditional weapon still in service was the lance (*koplje, kopja*). This lighter version of the medieval weapon remained in widespread use by hussars and Poles until the end of the war, although it began to disappear from about 1630 – not least, because it betrayed the approach of the cavalry unit when carried upright. One thousand lancers were raised in 1632, and 3,000 hussars under Caspar Sunyok were armed with it. This style of lance was 3.5–4m/11–13ft in length with a 15–20cm/6–8in iron or steel head. Below the head a small swallow-tailed pennon was attached, and the lance usually had a wooden ball at the handgrip for a stronger hold; however, at the moment of impact the cavalryman would have to drop the lance to prevent himself being pushed back out of his own saddle. In many cases the lance broke on impact near the grip, so few actually survived a battle. Some Croat troops also used the lance, but only in the first rank in a charge (it made enough of an impression to be remembered, in a song from 1626, by Austrian peasant rebels who faced

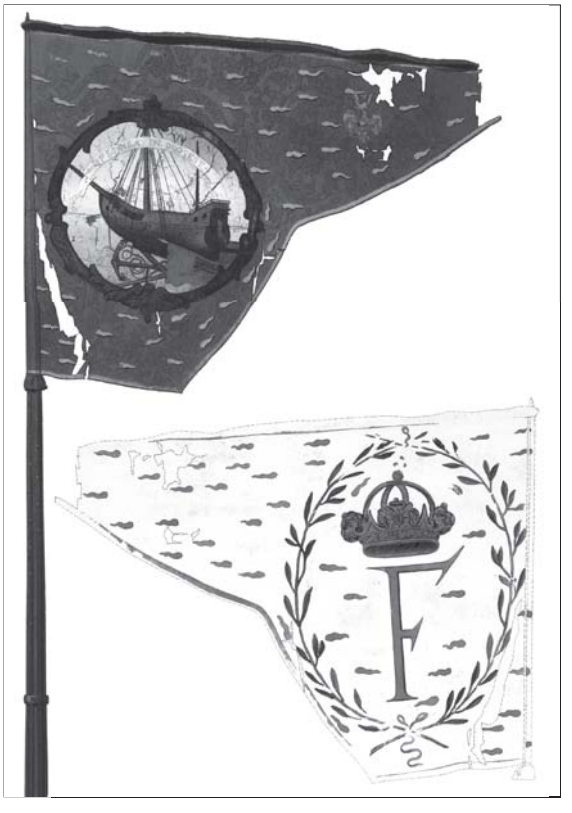
it). There were 150 lancers among the 2,000 men of Isolani's Croat regiment in 1632.

Clothing

The mixture of styles worn by these light cavalry is as confusing as their designations. The Croats, hussars and even Poles wore a mix of Hungarian, Turkish and Balkan garments, from which would develop the famous military hussar uniform of the mid-18th century onwards. The Croats wore their traditional costume: a short, tight tunic (sometimes sleeveless) with or without a long fur-lined coat, both being secured by buttons and cord loops, the tunic extending somewhat over the top of the trousers. Red was the preferred colour, but they were also of green or blue. The trousers were looser cut above the knee and tight below, often being tied below the knee. The headgear was a simple, extended bag-style hat, usually in red. In cold or wet weather they wore the traditional long red cloak (later famous across Europe as the infantry *Rotmantel*), with a hood that was sometimes in two parts buttoned together, although some continued to wear sheepskins. They wore the local style of leather boot, which was higher at the front than the back, and the harquebusiers had knee-length boots. As well as a waist sash, Croats wore a long neckerchief or scarf of wool (silk for officers); this served as protection from sweat and dust, but when necessary was used to bind wounds. This Croat fashion spread right across Europe, and as a name for a necktie it survives in many languages (Engish, cravat; French, *cravate*; Spanish, *corbata/corvatta*; Turkish/Hungarian, *kravat*; even Finnish, *kravatti*). As well as wearing better quality clothing, officers also wore a knee-length fur-lined coat and a fur hat.

A blue damask Imperial cavalry pennon from the Petrositz (previously Keglevich) regiment of Croats, made in 1632 and captured in April 1634 at Nieder-Lausitz. On the obverse (above), encircled by a palm wreath, is a scene of St George and the dragon, with a princess kneeling in prayer on a hill in the background. Above the saint is the motto *S GEORGIJ ADIUU NOS* – 'St George help us'. On the reverse (below) is a golden Imperial crown and the letter F (Ferdinand II) flanked by fire-striking steels and flames, again all surrounded by a wreath of palm leaves. Compare this with the similar pennon in Plate F3. (Armémuseum, Stockholm, ST 13:612; artist Hoffman-Jonsson; photograph Kjell Hedberg)

Under their mail, if worn, Hungarian hussars preferred a loose knee-length coat known as a dolman (from the Turkish *doloma*), the loose sleeves having decorative buttons up the seams. Their tight trousers reached down to leather ankle boots or, more often, Turkish half-calf boots. European square-toed 'bucket' boots were sometimes worn, but more often the Turkish-style pointed toe (which had irons inside it, forcing the foot into an unnaturally curved position). The tops of the longer boots were cut to a rounded shape, in a reference to the old leg armour. Officers were mostly noblemen, who wore higher-quality clothing, armour and equipment, richly ornamented with gold and silver thread and inlays or even jewels. In particular, the officers' coats were increasingly decorated with gold and silver cords with additional buttons. Combined with the animal skin worn over the left shoulder, mentioned above, this style was the main Hungarian contribution to the future 'hussar uniform'. As rank distinctions affluent officers wore a gilt or silver *čelenka*, which was a solid version of the feathers worn by other officers in their fur hats, and carried a small mace. Hungarian light



An interesting damask pennon carried by the Croat regiment of Stefan Draghi (Stjepan Dragije). On the red obverse (above), a medallion is painted with an image of a ship on a slipway, above an anchor, cables and a flag; across the rigging is a scroll with the motto *SPES: MEA. IN. DEO. EST* – 'In God I place my hope'. Just visible in the fly is the coat of arms of the Draghi, a dragon with three gold spheres. The reverse (below) is white, scattered with 'flames' – single, rather than the usual triple images; it bears a gold Imperial crown and F (Ferdinand II), surrounded by two sprays of laurel. (Armémuseum, Stockholm, ST 13:615; artist Hoffman-Jonsson; photograph Kjell Hedberg)

cavalry officers wore an upright white heron feather plume on the left side of the helmet.

Horse furniture

Unlike their heavy counterparts, the light cavalry used a saddle having its origins in Hungary or the Ottoman Empire. The light frame was covered with animal skins and sat on a richly decorated cloth, often with square or pointed corners, which is the origin of all future military shabraques across Europe. The pistol holsters were secured by a strap over the forward peak of the saddletree, the lower ends being secured to the breastband. On two straps, which joined below the horse's head with a rivet, hung a decoration which later became the hussars' gilt crescent; at this date it was a pair of wild boar's teeth, a horsetail or a fox's brush. The leather straps of an officer's harness were fixed together with gilt or silver rivets, with others purely for decoration.

Tactics

Both the Croats and hussar light cavalry were best suited to duties on the edges of the main battlelines – scouting, skirmishing, screening troop formations, harassing and unsettling enemy units, mopping up broken enemy troops, raiding baggage trains, and acting as messengers. As well as securing the outer edges of the army and seeking out forage, they established a reputation for mounting daring raids by day or night deep into enemy territory, a method of fighting that soon became known as '*kleine Krieg*' ('small-scale warfare'). One of their greatest exploits was the attack by several Croat irregular units on the rebel Hungarian camp during the night before the battle of the White Mountain in 1620, which badly affected the morale of the Protestant side, and consequently its performance the next day. As the natural choice for advance- and rearguards, on the day before the battle of Lützen they led Colloredo's formation in skirmishing against the Swedes to slow their advance over the Rippach stream, thereby giving Wallenstein valuable time to concentrate his troops.

On the battlefield the Croat harquebusiers were able to fight on foot, but these light cavalry continued to develop their skills out on the flanks, where they might be tasked with diversionary attacks or raiding into the enemy rear to loot baggage trains. While they formed up in conventional blocks they would launch their attacks in looser formation, and only press home if they encountered weaker enemy units; faced with stronger formations or counter-attacks, they would withdraw as swiftly as they had come, to regroup and try again elsewhere.

At Lützen, 38 squadrons of Croats under the command of Isolani were deployed together with cuirassiers on the left wing, facing the Swedish right wing, which was under the personal direction of King Gustavus Adolphus. When the wounded king was being carried back through the Swedish lines his party ran into Imperial cavalry – Götz's

cuirassiers and Piccolomini's Croats. Gustavus's personal bodyguard was cut down and the king was shot in the back, but serious wounds from three sword-thrusts can also still be seen in his leather buff-coat, preserved in the Swedish Royal Armouries. In the right side are one large and two small star-shaped holes, made by a cruciform-section *Panzerstecher* sword – a weapon only known to have been carried by the Croats in this battle; contemporary sources also place them in the area at the critical moment.

The skill, alacrity and bravery of these troops became admired across Europe, prompting other nations to form similar units, but they also soon acquired a darker reputation. As the irregular units had been raised along the Frontier by the promise of a free hand in the spoils of war rather than regular pay, the Croats' reputation as merciless sackers and plunderers was sealed at Magdeburg.

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PLATE COMMENTARIES

A: CUIRASSIERS, 1618–*c.*1630

A1: Cuirassier in 'Totenkopf' helmet

His three-quarter armour consists of a breast- and backplate, a small gorget, pauldrons and vambraces on the arms, articulated tassets with knee-pieces, and a helmet with a slitted mask-style visor. With the improvement of firearms by the beginning of the 17th century the priority was protection over appearance, so armour was becoming plainer but thicker; some suits now weighed as much as 42kg/92lb. He is armed with a heavy broadsword, and a pair of almost straight wheellock pistols about 77cm/30in long. The egg-shaped butt pommel came into fashion at the beginning of the 17th century, especially in southern Germany and Saxony; the stocks were often richly decorated with engraving and inlays. The pistol accessories – spanner, bullet bag and powder flask – hang from the holster, which has a fold-down top.

A2: Cuirassier-lancer

Although in significant decline, some cuirassiers were still using lances at the outbreak of the Thirty Years' War. The heavy three-quarter suits of armour were usually blackened, by a heated oil process, to protect them against rust; note the proofing mark on the breastplate, where a pistolball was fired to test its resistance. This favoured type of helmet was the burgonet with a 'falling buff' or 'Hungarian visor'. Burgonets were originally open helmets; in order to convert them into closed helmets for the cavalry, they were initially provided with separate face-guards made of several overlapping lames and attached to the sides of the helmet with laces, hooks or rivets, for lowering if required. In addition to his lance, this man is armed with a pair of pistols, and a long (140cm/55in) double-edged sword of a type dating from the last quarter of the 16th century.

A3: Cuirassier officer in Italian armour

His armour is in 'black-and-white' finish: the blackened surfaces of the main plates are set off by the burnished borders of the lames, patterns of engraved lines, and decorative rosettes around the rivets. His closed burgonet with a slitted and barred visor came into fashion about 1600 and remained in widespread use until the 1640s. The red velvet edging to the thick lining, visible under the gorget and pauldrons, suggests that this armour was made for a wealthy officer. As a rank insignia he is wearing a red sash over his right shoulder. The length of his broadsword (something between 86cm and 112cm/34–37in) shows that it is an older weapon, more suited to cutting than thrusting.

B: CUIRASSIERS, *c.*1630–48

B1: Cuirassier in half-armour

This has lost the knee-length extended tassets and knee-pieces; under it he now wears a knee-length leather buff-coat and high leather boots, which provide some, but lighter protection. His helmet is of the *zischagge* or *sishak* type derived from an Ottoman style, which has cheek-guards, a sliding nasal bar, and a rear neck-guard or 'lobster-tail' of small articulated lames. His wheellock pistols are now of the simpler so-called Baroque style, with a 'fishtail' butt. When firing, the rider usually held his pistol on its side with the wheel facing upwards, to improve the transfer of the spark to the charge. After the 1620s this '*épée wallone*' was the heavy cavalry sword *par excellence* across Europe; it is characterized by a thick knucklebow extending from the quillon, with two latticed or pierced side guards.

B2: Cuirassier cornet

Enemy standards were the most sought-after war trophy, so cuirassier cornets carrying the unit standard were usually heavily armoured and armed. This officer has three-quarter armour, and his burgonet helmet is fitted with a movable nasal bar and a rear socket for plumes. His armament consists of a (probably richly decorated) pair of wheellock saddle pistols and a Pappenheimer cavalry broadsword. Flying from a lance-like staff, secured by an arm-strap and a stirrup-bucket, is the Leibkompanie standard of Don Fernando de Capua's cuirassier regiment; all such 1st Company standards were white. The reverse side, shown here, depicts the Madonna and Child. On the obverse were the arms of the Holy Roman Empire: an Imperial crown, above the double-headed black eagle with an escutcheon shield on the breast surrounded by the chain of the Order of the Golden Fleece, and displaying the Habsburg arms of Hungary, Bohemia, Austria and Burgundy. The letters 'A.E.V.O.' (for Aquila Electa Vincit Omnia – 'The elected eagle will conquer all') appeared above the *Doppeladler*, and to the sides of it the Imperial cypher F II (Ferdinand II) and the year 1630. This flag is reconstructed from the original in the Stockholm Army Museum (ST 12:513).

B3: Cuirassier, *c.*1648

By the end of the wars the heavy cavalry had abandoned most of their armour, keeping just the breast- and backplates over thick leather buff-coats and gloves. Open helmets were still in use, but most cuirassiers had now opted for the broad-brimmed hat. His pistols are of the so-called Lützen type, as used by Gustavus Adolphus in his last battle. Pistols were carried in holsters with the butts pointing forward to make them easier to grasp and draw, each thus being drawn with the opposite hand. His sword is of the popular Pappenheimer style widely used across Europe.

A mannequin in harquebusier costume in the Heeresgeschichtliches Museum, Vienna, showing how much armour had been abandoned since the half-armour of the late 16th century. He is still protected by a breast- and backplate, gorget, and open burgonet. (HGM)

C: HARQUEBUSIERS, 1618–*c.*1630

C1: Harquebusier, early 1620s

In the early campaigns the harquebusiers still wore some armour, which here comprises a breast- and backplate with a gorget, plate vambraces (mail sleeves were worn as an alternative), and tassets. His open helmet is a burgonet with a high comb and a movable nasal bar. His harquebuse, about 90cm/35in long, dates from the late 16th century; it has fore- and backsights, a combined wheellock and matchlock firing mechanism, and – hidden here – a solid hexagonal butt of early German style. Note the trapezoid wooden powder flask among the gun accessories hanging from his crossbelt. His long, double-edged *Stantler* sword is as well designed for slashing as for thrusting.

C2: Harquebusier, *c.*1630

Like the cuirassiers, the harquebusiers gradually abandoned much of their armour. This man has only retained the breast- and backplate and a helmet, though he may have mail sleeves beneath his buff-coat. The helmet is of lower 'munition' quality, machine-made and finished by hand; such armour was produced in large quantities in Augsburg and Nüremburg, and exported across Europe. He is sporting a pistol, but his main weapon is a wheellock harquebuse with an ornately shaped butt, also produced in Augsburg around 1600. He carries a cutlass, a typical cavalry broadsword from the late 16th century that remained in use until the end of 18th century; it was characterized by a wider shell-style guard.

C3: Harquebusier officer, early 1620s

This resplendent figure wears a lavishly plumed burgonet, and exposes his fine lace shirt collar above a blackened half-armour, as designed in the late 16th century but still in use at the beginning of the Thirty Years' War. It has a half-laminated cuirass with short tassets, pauldrons, vambraces, and plate gauntlets which are fingerless for ease in handling firearms. His main weapon is an Italian wheellock harquebuse about 66cm/30in long with a musket-style butt, produced in Brescia at the end of the 16th century. His equipment includes a richly engraved curved powder flask, made from white ox horn boiled and flattened. He carries a typical early 17th-century broadsword, and would in addition have a high-quality pair of wheellock saddle pistols.

A wheellock harquebuse dating from the later Thirty Years' War. (Brkić Collection)

A wheellock pistol of the so-called 'Lützen' design – the type carried by King Gustavus Adolphus at that battle in 1632. (Brkić Collection)

D: HARQUEBUSIERS, *c.*1630–48

D1: Harquebusier, 1640s

By the end of the Thirty Years' War most harquebusiers had discarded armour completely in favour of buff-coats, although their armament remained largely unaltered. The wheellock harquebuse with its standardized stock – here decorated with carving – originates from the later-war period, as do the pistols. Just visible on the extra pistol thrust into his boot is a Baroque rib pattern of filed notches, which covers the rear of the barrel and the lock plate.

D2: Harquebusier, *c.*1635–40

This soldier of the later campaigns retains a breastplate, secured by a belt and crossed straps at the back, but he too has discarded a helmet in favour of a felt hat (though possibly with a proctective 'secrete' beneath). Cuirasses were being mass-produced in the cheaper 'munition quality'; to protect them against rusting the cheapest method was to apply black paint or lacquer, although this lacked the permanence of the hot-oil process of blackening. His cavalry broadsword closely resembles the Pappenheimer type.

E: DRAGOONS

E1: Dragoon

As a mounted infantryman, he still resembles his infantry musketeer comrades. He is armed with a heavy matchlock musket, and must carry its forked rest. Strung to his bandolier are a priming flask, a bullet pouch, and 12 small wooden flasks each holding the measured quantity of powder required for one shot. An infantry sword is belted at his hip. Although he is mounted he still wears shoes instead of boots, but with spurs attached.

E2: Dragoon officer

As symbols of his rank, this officer copies infantry officers in carrying a halberd, wearing a deep gorget, and identifying himself with a long, broad red sash wrapped and tied around his waist. His clothing and armament are of superior quality to those of the ordinary soldiers.

The *épée wallone* (Walloon sword) was the typical heavy cavalry sword from the 1620s onwards, and would remain in use in various forms long into the 18th century. Its characteristics were the knucklebow formed by extending a quillon upwards to the pommel, and pierced side guards braced by rings which also protected the thumb. (Brkić Collection)

E3: Dragoon ensign

This Fähnrich carries an Imperial-yellow swallow-tailed dragoon guidon, which we reconstruct from a captured original in the Army Museum, Stockholm (ST 13:587). On the obverse, the armoured right arm of God emerges from a cloud clutching a sword; above this is the motto PRO DEO ET PATRIA ('For God and Country'). On the reverse, the standard bears the usual Imperial arms and the motto PRO CÆSARE ('For Caesar' – i.e., for the Emperor). Like the other officer, the ensign wears expensive clothing, with long ostrich-plumes, a broad lace collar exposed over his gorget, a doublet with slashed or 'paned' sleeves in Imperial yellow, black and red, and red breeches and sash.

F: CROATS

F1: Croat harquebusier

Some Croat light cavalry regiments were designated as harquebusiers and armed with the usual wheellock weapon snap-hooked to a wide leather belt slung over the left shoulder. Their other armament might typically comprise a pair of wheellock pistols, a sabre, a sharp-pointed war-hammer for use against armoured enemies, and, under the saddle, a *Pallasch* broadsword or *estoc.* Note his long green coat, trimmed with fur and with rows of buttons and cords on the chest; and the characteristic white neckerchief, which would later evolve into the 'cravat' or necktie.

F2: Croat officer

This affluent Ober-Hauptmann is dressed in a richly decorated version of the traditional Croatian long coat, with gold cords and buttons, slit double sleeves and thick fur trim. On his bag-shaped hat, also edged with fur, he displays the ornamental feather-shaped metal symbol of his rank; his other mark of officer status is a mace, tucked into his wide silk waist sash. He is holding a sabre-hilted *Pallasch* sword, a favoured weapon of both Croats and hussars; note the saddle scabbard under his right leg. His weapons and Turkish-style horse furniture are elaborately decorated.

F3: Croat standard-bearer

This rider carries a single-tailed pennon standard as used by the light cavalry. It is reconstructed from one that was lost in 1631 at Zehdenick, north of Berlin, by one of the five companies in the regiment of the famous Croat war leader Isolani, which had originally been raised from Wallenstein's Leibgarde. The obverse is plain sky-blue patterned damask; the reverse, shown here, bears a gold and red Imperial crown, above a gold letter F for Ferdinand II, set between two fire-striking steels and 'flames' – a motif traceable to 15th-century Burgundy. The symbol of the fire-steel refers to the Order of the Golden Fleece, conferred on Wallenstein in 1628; the collar-links of that most senior Imperial order were shaped in this way. The original standard is kept in the Stockholm Army Museum (ST 13:608).

F4: Croat in traditional dress

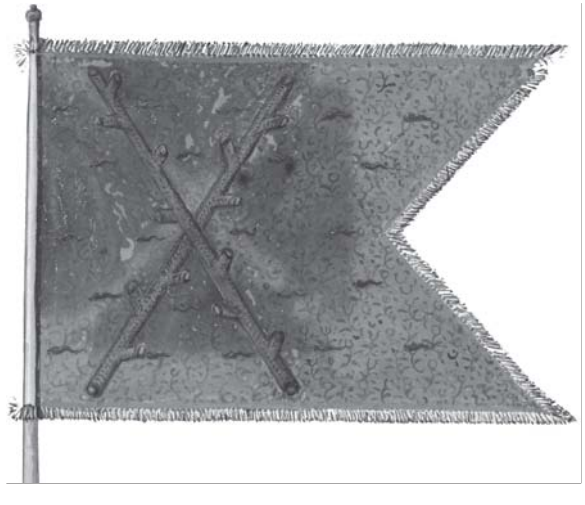
The unarmoured Croat cavalrymen wore their traditional clothing.Typical armament consisted of a Turkish, Hungarian or Polish sabre, an *estoc* or broadsword, and a pair of wheellock pistols. To demonstrate his weapon-handling and riding skills, this Croat is firing a pistol while carrying his *estoc* into the attack. Measuring around 115cm/45in, this longsword came to a sharp point intended to pierce ringmail or the joints of plate armour; the hilt is of Croatian or Hungarian style, with flat, down-turned quillons.

G: HUSSARS & POLES

G1: Hussar officer

He wears the typical protective armour used by the Hungarian light cavalry. The Hungarian *zischagge* helmet – with its conically fluted skull, cheek-guards, a peak with an adjustable nasal bar, and laminated 'lobster-tail' neckguard – originated in the Turkish *sisak*. Over his mail shirt, the cuirass is constructed entirely of lames to reduce the weight, and

Grey-blue Imperial – or possibly Spanish – swallow-tailed dragoon guidon, the patterned damask field scattered with silver flames. On both sides it bears a Burgundian saltire in gold with brown edging. (Armémuseum, Stockholm, ST 12:491; artist Hoffman-Jonsson; photograph Kjell Hedberg)



here is elaborately decorated with brass rivets and edging (this appearance echoed the rows of buttons and cords on the coats worn by many light cavalry officers). His rank is most obviously indicated by the leopardskin worn slung over the shoulder, his gilded mace, and his richly decorated weaponry. The entire horse furniture is of Turkish origin.

G2: Hussar lancer

To match the reach of their usual opponents, the Ottoman Turks, the hussars still had to use lances; this weapon is 3–4m/10–13ft long and painted overall, with a swallow-tailed pennon. His other armament includes a sabre and, under his saddle, a *Pallasch* or *estoc*, but no firearms. Note the way the sabre and the early type of sabretasche are slung from the shoulder. His dress is typically Hungarian, although the Turkish influences are clearest in his low yellow boots.

G3: Polish *Kozak*

This mercenary is armed and equipped in a similar way to the Croats and hussars, but instead of firearms he still carries a reflex bow and arrows in the highly decorated red bowcase and quiver attached to his waist belt. His Polish *karabela* sabre has the characteristic bird's-head pommel and grip.

H: MILITARY MUSICIANS

H1: Cuirassier kettledrummer

The kettledrums grew from their original small size, which had once been suitable for battlefield signals, into large hemispherical bowls that were practical only as camp or ceremonial instruments. Some were further decorated with a square banner displaying regimental symbols; here we show simply the Imperial double-eagle.

H2: Dragoon drummer

One of the clearest signs of the dragoons' origins was the infantry sidedrum used for signalling. In contrast to kettledrums these were light enough to be carried by the rider, usually on the left side of the horse, to allow the drummer to use his weapons unimpeded if necessary.

H3: Cuirassier trumpeter

Although the trumpet was the most practical way to pass signals in battle, trumpeters, like standard-bearers, were also symbols of their units, and so usually wore high-quality and elaborately decorated clothing. Over his uniform this trumpeter wears a yellow tabard emblazoned front and back with a hand-embroidered *Doppeladler*, and the same motif appears on the trumpet-banner. Here the trumpeter has turned his instrument slightly to the right, to protect it (and thus his teeth...) against sudden head movements by his horse.

Vienna museum mannequin of a Croat in traditional costume, *c.*1620 – compare with Plate F. Characteristics are the fur-trimmed cap, a long coat fastened with cords around buttons, a colourful waist sash, tight trousers, high boots, and a slung red cloak also with button and tape fastening. It is discernible how this costume gradually evolved into the highly stylized military hussar uniform of the 18th–19th centuries: a stiffened fur *kolpack* or busby with a hanging cloth bag; a tight *dolman* jacket and a slightly longer fur-trimmed *pelisse* over-jacket, both trimmed with many buttons and cords; tight breeches tucked into knee-high boots, and a complex two-coloured sash. (HGM)

A kettledrum used by the heavy cavalry, slung in pairs from the saddle. Originally brought to Europe from the Middle East in the 15th century, the *Pauke* now had a skin or vellum stretched over a hemispherical bowl usually 58–66cm/23–26in in diameter, and traditionally made of copper, brass or silver. The vellum was stretched taut by means of turnscrews through the iron rim which fitted tightly around the head of the drum; in the bottom of the bowl a small vent-hole allowed air to escape as it was displaced by the heavy beat. Although an object of near-religious veneration alongside the unit standards, kettledrums were not carried into battle – they could only produce a very limited range of signals. (Armémuseum, Stockholm, ST 44)

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